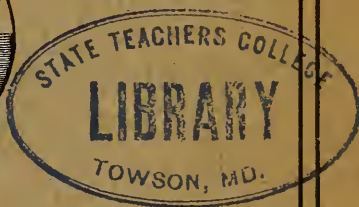


E. B. Jones

SIXTY-FOURTH ANNUAL MEETING
OF THE
MARYLAND STATE TEACHERS'
ASSOCIATION

BALTIMORE, MARYLAND
October 23 and 24, 1931

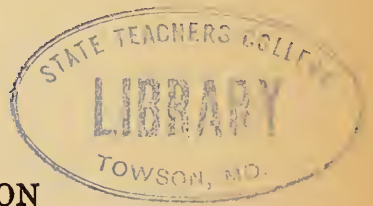


MISS HELEN M. JOHNSON, President

WALTER H. DAVIS Secretary

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MARYLAND STATE
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MISS HELEN M. JOHNSON
PRESIDENT

WALTER H. DAVIS
SECRETARY


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PRESS OF DEMOCRATIC LEDGER

Havre de Grace, Md.

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THE MARYLAND STATE TEACHERS' ASSOCIATION

OFFICERS FOR 1931

President.....	Miss Helen M. Johnson, Baltimore
First Vice-President.....	Byron J. Grimes, Supt., Hagerstown
Second Vice-President.....	Miss Innis Boyer, Hagerstown
Treasurer.....	Dr. Rozelle Berryman, Baltimore, Maryland Principal, Gwynns' Falls Park Jr. H. S.
Secretary.....	Walter H. Davis, Havre de Grace, Maryland Principal of Schools

EXECUTIVE COMMITTEE

Miss Helen M. Johnson, President.
 Mr. Byron J. Grimes, Vice-President.
 Mrs. Margaret S. Upham, 1928-31.
 Dr. Samuel M. North, 1929-32.
 Mr. Charles W. Sylvester, 1930-33.

MEMBERSHIP

Membership in the Association for 1931 was (as of December 1, 1931):

Allegany	297	Talbot	2
Carroll	233	Worcester	109
Cecil	137	Miscellaneous	6
Frederick	285	Baltimore	85
Howard	80	Charles	32
Prince George	13	Dorchester	134
Somerset	102	Harford	177
Wicomico	146	Montgomery	57
Baltimore City	1042	St. Mary's	7
Anne Arundel	24	Washington	181
Caroline	102	Towson Normal	48
Calvert	38	Salisbury Normal	14
Garrett	3	Frostburg Normal	4
Kent		State Dept. Staff.....	16
Queen Anne	69	Report from Kent not yet in.	

Kent and Talbot report unofficially 100% membership but dues have not been received.

Nine counties were 100% in membership at time of printing: Cecil, Carroll, Caroline, Calvert, Dorchester, Frederick, Harford, Queen Anne, Somerset, Wicomico, Worcester. Salisbury Normal is also 100%.

WALTER H. DAVIS, Secretary

STANDING COMMITTEES FOR 1931

(Appointed by the 1930 President, Mr. Byron J. Grimes)

Educational Progress:

Dr. John L. Stenquist, Baltimore.
W. C. Phillips, Ellicott City.
Miss Lida Lee Tall, Towson.
Mary A. Adams.
C. H. Cordry, Salisbury.

Resolutions:

C. L. Kopp, Cumberland.
Norman Clark, Baltimore.
Miss Ida Belle Wilson, State Normal School, Salisbury.

Auditing:

Dr. E. J. Becker, Baltimore.
Raymond Hyson, Reisterstown.
Walter Huffington, Baltimore.

Credentials:

J. H. Schwatka, Baltimore.
R. F. Cromwell, Upper Marlboro.
E. Guy Stapleton.

Legislation:

W. J. Holloway, Salisbury.
G. L. Palmer, Frederick.
Mrs. H. E. Parkhurst, Baltimore.
Nicholas Orem.
Dr. Angela Broening.

Teacher's Pensions:

E. W. Broome, Superintendent, Rockville.
M. S. H. Unger, Superintendent, Westminster.
T. G. Bennett, Superintendent, Centreville.
E. W. Pruitt, Superintendent, Princess Anne.
David E. Weglein, Supt. of Baltimore City Schools, Baltimore.

N. E. A. Home:

Joseph Blair, Principal, Sparrows Point.
Grace Kramer, Bureau of Measurements, Baltimore.

AFFILIATED DEPARTMENTS

Agriculture:

Donald Watkins, President, Mt. Airy.
L. E. Taylor, Secretary, Centreville.

Art:

Miss Mary H. Chrissinger, Chairman, Hagerstown.
Miss Pauline Dunlavy, Secretary, State Normal School, Towson.

Classical:

Dr. W. P. Mustard, President, Johns Hopkins Univ., Baltimore.
Miss Hattie J. Adams, Secretary, Western H. S., Baltimore.

Commercial:

Mrs. Frances D. North, Western H. S., Baltimore.
Carroll Rankin, Secretary, Westminster.

Educational and Vocational Guidance:

Miss Mary T. McCurley, Chairman, Goucher College, Baltimore.
Miss Helen E. Gans, Secretary, Jr. H. S., No. 47, Baltimore.

Elementary Principals:

Miss Eva Gerstmyer, Chairman, School No. 214, Baltimore.
Mrs. Catherine Wells, Secretary, Riverdale.

English:

Dr. Francis A. Litz, Chairman, Western H. S., Baltimore.
Miss Augusta Klotz, Secretary, Baltimore.

Grammar:

Miss Katherine Healy, Chairman, Hagerstown.
Miss Edna DeVilbis, Secretary, Mt. Airy.

History:

Arch Golder, Chairman, City College.
Miss Helen Miller, Secretary, Eastern H. S., Baltimore.

Home Economics:

Miss Elisabeth Amery, Chairman, State Dept. of Education, Baltimore.
Miss Helen Weber, Secretary, Baltimore.

Industrial:

Paul A. Willhide, President, Boys' Vocational School, Baltimore.
Miss Cecile B. Colbert, Secretary, Girls' Vocational School, Baltimore.

Library:

Dr. J. H. Apple, Chairman, Hood College.
Mrs. M. A. Newell, Secretary, 6 E. Read St., Baltimore.

Music:

Miss Hazel McDonald, Chairman, State Normal School, Towson.
Miss Dorothy Willison, Secretary, Allegany H. S., Cumberland.

Parent-Teachers:

Rev. Kingman Handy, President, Baltimore.
_____, Secretary.

Physical Education:

Dr. William Burdick, President, 7 E. Mulberry St., Baltimore.
Miss Bertha M. Schools, Secretary, 3 E. 25th St., Baltimore.

Primary Kindergarten:

Miss Eleanor Shank, Chairman, 526 Nottingham Road, Baltimore.
Miss Sara Reese, Secretary, School No. 214, Baltimore.

Science:

E. G. Stapleton, Chairman, Raspeburg.
Miss Mary Carroll, Secretary, Baltimore.

Secondary Education:

Dr. Ernest J. Becker, President, Western H. S., Baltimore.
Raymond S. Hyson, Secretary, Reisterstown.

Vocational Education:

Miss Elisabeth Amery, Chairman, State Supervisor of Home Economics,
Lexington Building, Baltimore.
Mrs. Frances D. North, Secretary, Western H. S., Baltimore.

DELEGATES

The following delegates reported to Credential Committee:

1. Allegany County—T. T. Mann, O. B. Boughton, Ralph Webster, Isabelle Screen.
2. Teacher Association of Baltimore County—Mr. Thomas G. Pullen, Jr., Mr. R. S. Hyson, Grace K. Sterling, Viola Almony, Miss Nellie Gray, Mr. George Schluderberg, Mr. Alvey Hammond, Mrs. Mary Schaefer, Miss Dora Will, Mr. J. Wilbur Bollinger.
3. Calvert County Teachers' Association—Miss Frances Gruver, Mrs. Margaret Bowen.

4. Caroline County—Miss Edith Towers, Mr. W. K. Cumming, Mr. M. K. Hoke, Miss Bernice Wooters, Miss Louise Brooks, Miss Irma Nichols, Mrs. Mary Rairigh, Mr. E. M. Noble.
5. Carroll County—Miss Olive Mount, Mr. Claude Yowell, Miss Ellen Jordan, Reverend Thurlow Null.
6. Cecil County—Miss Charlotte McFadden, Miss Mary Walters, Mr. George Gifford, Miss Dorothy Hooper.
7. Charles County—Miss Gertrude Ryon, Mr. Sydney Lawler, Mr. T. C. Martin, Miss H. Virginia Mudd.
8. Dorchester County—Mrs. Mildred Gordy, Miss Bessie E. Bradshaw, Mr. William R. Sowers, Miss Margaret Gilles.
9. Frederick County—Mr. A. L. Leary, Miss Katherine Wiener, Mr. Howard O. Flook, Miss Rachel Smith, Miss Ella V. Kreig, Mr. Wilbur Devilbiss.
10. Garrett County—Miss Ruth Speicher, Mr. O. B. Aiken, Miss Emma Caulk, F. D. Bittle, Marshall Brown.
11. Goucher College—Professor Ethel Bowman, Professor Stella McCarty.
12. Harford County—A. H. Graybeal, J. S. Endslow.
13. Howard County—Mr. R. Likely, Mr. W. G. Dawson, Mr. Mumford, Jr., Miss Ethel Snyder, J. Wilson Lord.
14. Johns Hopkins University—Mary L. Dougherty, E. Earle Franklin.
15. Kent Co. Teachers' Association—Mary E. Simpers, Harry R. Raisin, W. J. Stenger, Ella P. Robinson, A. Mildred Hoyle, Florence Jewell, W. A. P. Strang.
16. University of Maryland—Dr. Willard S. Small, Dr. H. F. Cotterman.
17. Maryland State Normal School—E. Curt Walther.
18. Montgomery County Teachers' Association—Rebecca Fields, Edna Hauke, Austin Lamar, Anna M. Rose, L. L. Powers, A. L. Hicks.
19. Prince George County Teachers—W. R. C. Connick, Miriam McD. Holmes, Catherine T. Reed.
20. Salisbury Normal School—Thomas J. Carruthers.
21. Somerset County—Theresa Horner, Elizabeth Warren, William C. Graham, Emma W. Sommers, C. Allen Carlson.
22. Talbot County—Myrtle Bryant.
23. Washington College—Frederick T. Livinggood, Florence Snodgrass.
24. Washington County Teachers' Association—E. Russell Hicks, J. D. Zentmyer, Clarence Foltz.
25. Worcester County Teachers—Wm. L. Bennett.

**SIXTY-FOURTH ANNUAL MEETING
MARYLAND STATE TEACHERS' ASSOCIATION
BALTIMORE, MARYLAND**

October 23 and 24, 1931

VISITATION

The morning of Friday, October 23, was devoted to visits to Baltimore City Schools. Mr. Sylvester had prepared and distributed a pamphlet stating the types of work to be found in the different schools and the county teachers in large numbers visited the city schools near the places of the general meetings.

GENERAL MEETINGS

Because of the large number of teachers expected, three general meetings were planned and held from 2-3 P. M., Friday, October 23, and one general meeting for the morning of Saturday, October 24. The attendance at the three general meetings Friday was between 5,500 and 6,000.

SECONDARY—SPECIAL GENERAL MEETING

Friday, October 23, 1931; 2-3 P. M.

BALTIMORE CITY COLLEGE AUDITORIUM

33rd Street and The Alameda

Dr. Samuel M. North, presiding

Invocation—Dr. John S. German, pastor, Broadway Methodist Episcopal Church.

Address—Dr. W. A. Jessop, President, University of Iowa.

Adjournment to sectional meetings.

INTERMEDIATE GENERAL MEETING

Friday, October 23, 1931; 2-3 P. M.

POLYTECHNIC INSTITUTE AUDITORIUM

Mr. Charles W. Sylvester, presiding

Invocation—Dr. S. Tagart Steele, pastor St. David's Protestant Episcopal Church.

Address—"The Research Function in Teaching"—J. Cayce Morrison, Assistant Commissioner for Elementary Education, State of New York.

KINDERGARTEN-PRIMARY GENERAL MEETING

Friday, October 23, 1931; 2-3 P. M.

CLIFTON PARK JUNIOR HIGH SCHOOL AUDITORIUM

Harford Road above 25th Street

Mr. Carlton E. Douglas, presiding

Invocation—Dr. Martin Luther Enders, pastor First English Lutheran Church.

Address—Arthur Dardineau, Supervising Director of Instruction, Detroit.

Adjournment to sectional meetings.

ALL GENERAL MEETING

Saturday, October 24, 1931

BALTIMORE POLYTECHNIC INSTITUTE

Dr. Samuel M. North, presiding

REPRESENTATIVE ASSEMBLY—9.00-10.15 A. M.

Annual Business Meeting.

Note—Delegates must present credential cards from their respective organizations. Badges of identification must also be worn. These can be obtained from the Committee on Credentials on Friday, October 23, at 1.30 P. M. at City College, and Saturday, October 24, at 8.30 A. M. at Polytechnic Institute.

Report of Committee on Educational Progress.

Report of Committee on N. E. A. Home.

Report of Committee on Legislation.

Report of Committee on Teachers' Retirement Fund.

Report of Committee on Resolutions.

Report of Treasurer.

Report of Auditing Committee.

Report of Executive Committee.

Election of Officers.

64TH ANNUAL MEETING MARYLAND STATE TEACHERS' ASSOCIATION

CONCERT BY THE ALL-MARYLAND HIGH SCHOOL ORCHESTRA

Saturday Morning, October 24, at 10.15 o'clock

AUDITORIUM, POLYTECHNIC INSTITUTE

Baltimore, Maryland

Conductor, John Itzel, Supervisor of Instrumental Music, Baltimore City
Schools

Associate Conductor, Peter Buys, Teacher of Instrumental Music,
Hagerstown High School

Orchestra Committee

Thomas L. Gibson, Maryland State Supervisor of Music.

John Itzel, Supervisor of Instrumental Music, Baltimore Public Schools.

Philip S. Royer, Supervisor of Instrumental Music, Carroll County.

Charles C. T. Stull, Supervisor of Music, Frederick County.

Peter Buys, Teacher of Instrumental Music, Hagerstown High School.

Chairman

John Denues, Director of Music Education, Baltimore City

PROGRAM

"The Star Spangled Banner"

March, "Carmen".....	Bizet
Overture, "Light Cavalry".....	Suppe
Selections from "Faust".....	Gounod
First Movement from the D Minor Concerto.....	Gade
for Violin	

Soloist, Frieda Etelson, Western High School, Baltimore, 1930

Accompanist, M. Frances Jackman, Supervisor of Music Education, Element-
ary Schools, Baltimore City

Romance, "Old Acquaintance".....Buys
(Conducted by the Composer)

"Adoration" Borowski

March, "Le Pere de la Victoire".....Ganne

PERSONNEL OF ALL-MARYLAND HIGH SCHOOL ORCHESTRA

Piano

Hilda Jacobs, Eastern High School, Baltimore; Jerome Levy, School No.
223, Baltimore.

Violin

Michael Agate, School No. 91, Baltimore; Raymond Baldwin, School No.
90, Baltimore; Dorothy Bennett, Western High School, Baltimore; Charles
Billmyre, Allegany High School, Cumberland; Louise Birely, Union Bridge
High School; Inez Botzler, School No. 90, Baltimore; Ralph DeArment, Spar-
rows Point High School; Sidney Carasik, Baltimore City College; Sidney
Carson, Baltimore City College; Claire de Vore, Pa. Ave. High School, Cum-
berland; Leon Deane, Baltimore City College; Charles C. Ditto, Hagerstown
High School; Paul M. Edwards, Sparrows Point High School; Margaret El-
liott, Sparrows Point High School; Milton Feldstein, Allegany High School;

Nathan Finkelstein, Baltimore City College; Philip Friedenberg, Baltimore City College; Shirley Furtney, Allegany High School.

Samuel Gertner, Baltimore City College; Hively Gladhill, Union Bridge High School; Sylvia Goldman, Western High School, Baltimore; Harold Hallman, Caroline High School, Easton; Sue Hawkins, Beall High School, Frostburg; Irvin Herman, School No. 91, Baltimore; Mary Hosfield, Eastern High School, Baltimore; Adell Jackson, Sparrows Point High School; Kenneth James, Beall High School, Frostburg; Ruth Johnson, Eastern High School, Baltimore; Evelyn Kaplan, School No. 1, Baltimore; Joseph Kaplan, Greene St. High School, Cumberland; Robert Kennedy, Frederick High School; Byron Kight, Allegany High School; Ruth Knouss, Eastern High School, Baltimore; Frieda Lebowitz, School No. 49, Baltimore; Henry Levitt, School No. 91, Baltimore; Margaret Lewis, Westminster High School; George London, Baltimore City College; Herbert Manikin, School No. 91, Baltimore.

Frank McFarland, Pa. Ave. High School, Cumberland; Freda McGlaughlin, Hagerstown High School; J. William Miller, Boonsboro High School; Leonard Moss, School No. 90, Baltimore; Dorothy Naiditch, School No. 1, Baltimore; Edna Osborne, Western High School, Baltimore; James Packett, Hagerstown High School; Lillian Passen, School No. 1, Baltimore; Harry Peretz, Baltimore City College; Leonard Piven, School No. 91, Baltimore; William Podolsky, Forest Park High School, Baltimore; Jessie Pugatch, Eastern High School, Baltimore; Billie Rauk, Beall High School, Frostburg; Thomas Rearick, Sparrows Point High School; Rosie Redmond, Hagerstown High School; Edgar Rhodes, Thurmont High School; Victor Rowney, Polytechnic Institute, Baltimore; Carol Schilling, Eastern High School, Baltimore.

Louis Schlein, School No. 223, Baltimore; Joseph Schreibfeder, Baltimore City College; Rose Scott, Eastern High School, Baltimore; Ruth Searls, Eastern High School, Baltimore; Melvin Sherr, Baltimore City College; Rhoda Shoben, Western High School, Baltimore; Augusta Smallwood, Western High School, Baltimore; Mildred Snyderman, Western High School, Baltimore; Ralph Taylor, Boonsboro High School; Brayden W. Thomas, Hagerstown High School; Donald H. Towson, Sparrows Point High School; Lillian Tucker, School No. 90, Baltimore; John Vandegrift, Allegany High School; Francis Webster, Allegany High School; Dorothy M. Wiseman, Thurmont High School; Daniel Wolk, School No. 49, Baltimore; Gilbert Yaffe, Baltimore City College; Myrtle Youngman, Eastern High School.

'Cello

Mabel Bagg, Western High School, Baltimore; Beatrice Bettelman, Eastern High School, Baltimore; Valerie Blount, School No. 233, Baltimore; Earl Over, Hagerstown High School; Bernard Sherman, School No. 40, Baltimore.

Bass

David Lester, Baltimore City College.

Flute

Junior Beard, Hagerstown High School; George Didusch, Baltimore City College; Wilson Toula, School No. 80, Baltimore.

Clarinet

Blair Beauchamp, Boonsboro High School; John K. Elseroad, Hampstead High School; Thurman Finrock, Hagerstown High School; Raymond Glaser, Forest Park High School, Baltimore; Adrian Kloczewski, Baltimore City College; Kauko Leino, Sparrows Point High School; Samuel McFarland, Central High School, Denton; Harold Miller, Middletown High School; William Rodenhi, Baltimore City College; Samuel Stallings, Baltimore City College.

Mellophone and Horn

Chester Castle, Frederick High School; Marvin Jacobs, Hagerstown High School; Lester Krone, Thurmont High School; Paul Stottlemeyer, Thurmont High School.

Trombone

Benton Arbaugh, Thurmont High School; Albert Baltzley, Hagerstown High School; Daniel Dunlap, Allegany High School; Orville Frock, Union Bridge High School; James A. Richards, Sykesville High School.

Tuba

David Schnebly, Hagerstown High School; William Zschunke, School No. 90, Baltimore.

Drum

Samuel Cohen, Baltimore City College; C. Raymer Derr, Middletown High School; Robert E. Garrison, Brunswick High School; Spedden A. Hause, School No. 223, Baltimore.

Saxophone

Herman Arrington, Sykesville High School; John K. Baker, Hagerstown High School; Barbara Bennett, Sharptown High School; Iris Bennett, Sharptown High School; Edna Bouman, Charles Co. High School; Blaine Broadwater, Union Bridge High School; Albert Brookes, Sparrows Point High School; Manuel Cohen, Baltimore City College; Chester De Haven, Allegany High School; Harvey Fleetwood, Caroline High School, Denton; Raymond Karchen, Baltimore City College; Robert Keadle, Boonsboro High School; Homer Kendall, Hagerstown High School; Jack G. Kepler, Middletown High School; Charles Murray, Frederick High School; Linwood Myers, Frederick High School; Robert Neikirk, Hagerstown High School; Clyde Pentz, Caroline High School; Herbert Platt, Central High School; R. Karl Shank, Hagerstown High School.

Trumpet

Milton Baldwin, School No. 90, Baltimore; Lawrence Bankert, Charles Carroll High School; Arthur Brill, Allegany High School; Frank Byer, Allegany High School; Arthur Dobie, Pa. Ave. High School, Cumberland; Richard Dunlap, Allegany High School; George Goldsborough, Caroline High School; Herbert Harp, Hagerstown High School; Paul D. Harp, Middletown High School; Julian Krupnick, Forest Park H. S., Baltimore; Richard La Course, School No. 90, Baltimore; Charles Lego, School No. 79, Baltimore; Everett Northrop, Hagerstown High School; Sally Price, Beall High School, Frostburg; Irvin Smith, Caroline High School, Denton; Robert Smith, School No.

70, Baltimore; Wayne Strasbaugh, Boonsboro High School; George H. Wilson, Caroline High School.

Tympani

Rowland Ritte, Baltimore City College.

**ANNUAL BUSINESS MEETING
OF THE MARYLAND STATE TEACHERS' ASSOCIATION**

Saturday, October 24, 1931

POLYTECHNIC INSTITUTE

Dr. Samuel M. North, presiding

Miss Helen M. Johnson, president, was absent because of critical, and later, fatal, illness.

The following committee reports were read and approved:

Educational progress by Dr. John L. Stenquist.

Legislation by Mr. William J. Holloway.

Resolutions by Mr. Chas. L. Kopp.

Teachers' Pensions by Mr. Edwin Broome.

The reports of the Treasurer and Auditing Committee could not be presented because the business of the convention had not been concluded. These reports were promised for inclusion in the proceedings.

The programs of the convention were accepted as the report of the Executive Committee.

Officers were elected as follows for 1931-32:

President—Mr. James M. Bennett, Supt., Salisbury.

First Vice-President (automatic)—Miss Helen M. Johnson, Baltimore.

Second Vice-President—Mr. F. R. Cromwell, Prin., Brunswick.

Treasurer—Dr. R. Berryman, 4224 Euclid Ave., Baltimore.

Secretary—Mr. Walter H. Davis, Prin., Havre de Grace.

Member Executive Committee—Mr. John L. Dunkle, Prin., Normal School, Frostburg.

Trustee Teachers' Retirement System—Mr. Edwin W. Broome, Supt., Rockville.

After introduction of the new president he declared the Representative Assembly adjourned.

WALTER H. DAVIS, Secretary.

Note: November 20, the Executive Committee named Miss Eva Gerstmyer first vice-president to fill vacancy caused by death of Miss Helen M. Johnson.

REPORT OF THE COMMITTEE ON EDUCATIONAL PROGRESS

for 1930 and 1931

The year 1930 marked the close of a decade of remarkable achievement in public education in the State of Maryland, and while the report of your committee technically covers only the years 1930 and 1931, it has seemed to us that our report may be more significant if instead it deals briefly with the outstanding events of the decade ending 1930, together with a report for the year 1931. From the various reports that have been issued by the State of Maryland and the Board of School Commissioners of the City of Baltimore, the following items seem most significant.

For the State:

1. Equalization of educational opportunity is being realized throughout the state since it has become possible with the aid of the Equalization Fund for every county to put the State's minimum program into effect without excessive county taxation for schools.

2. Improvement in the instruction given in rural and town elementary schools in every county has resulted from the appointment of at least one supervising or helping teacher.

3. A normal school education has been made available to high school graduates of superior scholarship, ability, character and personality at no cost for tuition and with a charge of but \$5 per week for room and board. There are now sufficient students graduated to fill all vacancies in the Maryland elementary schools.

4. Because of the minimum salary schedule adopted in 1922 which attracts county high school graduates to the normal schools, and because of effective performance on the part of the normal schools, and the financial aid of the equalization fund, the counties have been able to fill all elementary school vacancies with normal school graduates or persons of equivalent training. In no other state in this country in the schools outside the large cities is it possible to find 95 per cent of the elementary teachers with a two year normal school course or equivalent training.

5. The Teachers' Retirement System, established by the Legislature in 1927, and placed on a sound financial basis through contributions of the state and the teachers on a fifty-fifty basis, has brought a sense of security and stability and freedom from worry for the teaching staff.

6. The multiplication of facilities for a high school education, not only through the opening of additional schools, but by the broadening of the courses offered in existing schools, to which more and more pupils are transported at county expense, has enlarged the educational horizon for an ever larger proportion of the boys and girls of high school age.

7. The State's program for helpful supervision of the teachers in high

schools by three State Supervisors for the academic subjects (English, mathematics, social studies, science and foreign languages), by supervisors of music, agriculture, home economics and industrial arts, insures a gradual approach to the highest standard possible of attainment in each of these subjects.

8. The schools' contribution to the promotion of agriculture in Maryland is made through the training of high school boys in courses in agriculture.

9. Courses in industrial arts, which provide activities connected with sheet metal, electricity, cold metal, concrete, automobiles, as well as wood, are replacing the courses in manual training required of high school boys for many years past. Over one-half of the high school boys enrolled are now taking industrial arts' courses.

10. The courses in home economics for high school girls, formerly limited to cooking and sewing, are being broadened to include an appreciation of the principles of nutrition and of selection and serving of food, and an understanding of the art principles of color and design underlying the selection of clothing. Home economics courses are now available in high schools enrolling 86 per cent of the county high school girls.

11. For those who are given sufficient instruction to appreciate the recreational possibilities in singing and the playing of instruments, there is usually little need to worry about the profitable and helpful use of leisure time. Each year more emphasis is placed upon giving every school child an appreciation of the value and pleasure in music and upon offering advanced elective courses in high school for those who have unusual musical gifts.

12. Through the Playground Athletic League there has been commendable growth in the decade in the physical activity program of the curriculum. Pupils first participate by practicing for and taking the badge tests of physical efficiency. For the school year ending in June, 1931, 40,883 county white boys and girls above the third grade, 49 per cent entered to try for badges.

13. The inauguration of a policy involving state encouragement of the establishment of classes for physically and mentally handicapped children means that some of those who formerly have been deprived of an education will be able to have schooling.

14. Acceptance of the Federal program for vocational rehabilitation by appointment of a State Supervisor means that valuable service may be rendered those cases reported which are eligible for and susceptible of vocational training.

15. Encouragement of the policy of consolidation of schools has brought about the elimination since 1920 of nearly 600 small rural schools with one teacher for all the grades, and of some of the small inefficient high schools.

16. With funds available from county bond issues authorized by the legislatures since 1918, in all except four of the counties, much has been done to meet the need for new buildings to take care of the increase in high school enrollment, and, in counties which are growing, the additional elementary school pupils. Several counties have been able to make considerable progress toward a county-wide consolidation program. Since the fall of 1918 the counties have spent over nineteen million dollars and the City of Baltimore over thirty million dollars to finance their school building program.

17. A periodic check of the performance of pupils in the schools by state wide testing programs in reading, arithmetic, history, and geography planned by the staff of the State Department and by county superintendents, and an annual study of the administrative and supervisory procedure in every county insure steady improvement in all phases of the work which lead to better instruction of pupils.

18. Parents are vitally interested in what the schools are doing for their children. This is proved by the existence of parent-teacher associations in nearly one-half of the schools for white children.

19. All aspects of the work in the colored elementary schools show great improvement; the number and enrollment of secondary schools for colored boys and girls have grown larger each year; notable additions to the physical plant and a better trained and larger faculty have made possible bona fide normal school instruction at the Bowie Normal School for a student body of stronger intellectual ability.

20. Maryland's teaching staff, working under the present excellent State school law, has brought the schools to the highest level of achievement possible at the present stage of development. Because of the efficient type of organization for administration and supervision, the people of Maryland get more per dollar expended for schools than do the people of any other state.

For the City of Baltimore, progress has been marked in the following ten particulars:

1. In the reorganization of the Department of Education into a unified system. This has been achieved through a greater control of the Department of Education by the Board of School Commissioners and through a closer articulation between the various grades and departments. The program has been greatly enriched at every point. The 6-3-3 plan is now fully operative. The interrelation of the several units of the school system has been constantly improved. The high schools have been welded into a system of secondary education rather than a series of isolated high schools.

2. In the reorganization of curricular offerings in terms of pupil needs and the development of courses of study therefor. The revision of curricula has been very extensive. At every level there has been complete reconstruction and extension of educational opportunities. In elementary grades a

differentiated curricula in terms of three ability levels is now in effect. In junior high schools an exploratory program for adolescent children of the 7th, 8th and 9th grades has been developed. The chief features are:

- a. A standard program of studies with differentiated curricula for different types of pupils.
- b. Provision for educational and vocational guidance in each school, and a counselor assigned to each one.
- c. Provision for pupils above the average in ability through enriched curricula and accelerated classes.

A system of vocational schools has been developed.

3. In the development of a technique of course of study construction. This technique consists of participation by a large proportion of the teaching staff of inexperimental tryouts, and in various other devices by which the task of installing new courses is largely a part of their construction.

4. In the use of city-wide testing programs. A comprehensive system of self-surveys are now carried on each term. Each pupil is examined by means of standardized tests in the basic subjects and on the basis of the resulting records is planned the program of remedial instruction, improved classification, and city-wide supervision.

5. In the extension of trained supervisory leadership to all teachers. The Baltimore conception of supervision is leadership. This leadership is exercised in large part through control of course of study construction and in the use of the rich data from testing programs. Every classroom in the city now has the benefit of a trained supervisor.

6. In the up-grading of personnel, especially the teaching corps. The first step in building up a teaching force was the new and comprehensive salary schedule formulated in 1922 which lifted Baltimore out of the lowest position among the large cities. The second step has been the gradual raising of requirements for appointments.

7. In the holding power of the public schools. The phenomenal growth of secondary school enrollment is evidence that the upper grades of school system where attendance is voluntary are presenting a type of schooling that is meeting the needs of an increasing number of boys and girls.

8. In an extensive rehabilitation program and the expenditure of over \$20,000,000 for new buildings. Direct results of this program to date may be summarized as follows: Thirty buildings providing for over 28,000 sittings in home classrooms including four senior high schools, three junior high buildings, twenty elementary and three buildings designed for platoon organization have been erected.

9. In the improvement of housing conditions. As a result of the erection of new buildings throughout the city, the number of elementary

pupils seated in makeshift quarters has been greatly reduced. A large number of unfit buildings have been abandoned, a large number of poor buildings have been overhauled and reconstructed.

10. In improved administrative techniques. Among these may be mentioned the reorganization of the Business Department; improved methods of financial and cost accounting; improved handling of the Supply Department; and control of maintenance and repairs by the Board of School Commissioners; the organization of a Bureau of Research which prepares administrative reports, conducts professional examinations and maintains a program of general instructional research; a greatly enlarged program of night schools, and a program of education in the colored schools parallel to that given in the white schools.

For the year 1931, the forward stride has been checked somewhat by the danger of retrenchment. This is not to say that serious cuts have as yet taken place but the program of expansion apparently cannot go on unimpeded. Despite this, however, definite items of progress for the year 1931 can be recorded. This is true particularly in the field of legislation. As pointed out by Superintendent Cook, "The three outstanding contributions to the Maryland School Laws from the Acts of the 1929 and 1931 legislative sessions are concerned with the state program for the special education of handicapped children, with compulsory school attendance in the counties and Baltimore City, and with the extension of the normal school course for white students from two to three years." While a part of this achievement took place before 1931, it may be conveniently referred to under 1931. These three items are believed to be of major significance.

Among the items of progress for Baltimore City for the current year may be mentioned the following:

1. Four new buildings designed for the use of elementary schools placed in operation during the year.

2. Reconstruction of the Polytechnic Institute including an auditorium large enough to hold the senior high school commencements, saving the Department of Education the rental of the Lyric for major indoor events.

3. Building program authorized by the Third School Loan well advanced with 13 school buildings and major additions actually under construction or under contract, as well as a new administration building for the Board of School Commissioners and its staff.

4. Selection of sites for schools for handicapped children as provided for in Ordinance No. 1530 signed by the Mayor, July 6, 1930.

5. A program of building maintenance progressively nearer to accepted standards of efficiency.

6. An extensive campaign to improve the reading performance of pupils at all levels of academic progress.

7. A program of course of study revision and construction that is essentially supervisory in character and elicits the cooperation and best thinking of the teachers who are to use the finished product.

8. Higher standards for the selection of teachers.

9. An extensive program of standardized testing of an inventory character, the results of which form the basis of supervisory and administrative policies.

10. Gratifying reduction in adult illiteracy during the decade since the 1920 census.

This long list of achievements for the decade just ended and for the current year seems to your committee to be one of which any state might well be proud. The program for the most part has been marked by steady and consistent growth. To be sure, in some particulars it has been almost spectacular, as for example, in the building program. But the less spectacular achievements may very possibly be of even greater significance. If equal progress can be made for succeeding decades, we will indeed be making tangible progress toward that goal in which education shall truly be the State's greatest business.

Respectfully submitted,

W. C. Phillips,

Mary A. Adams

Lida Lee Tall

C. H. Cordry

John L. Stenquist, Chairman

Committee on Educational Progress

REPORT OF THE COMMITTEE ON LEGISLATION

An association like this, together with all other recognized organizations interested in the social welfare, is concerned with two aspects of legislation:

- (1) To place in the statute books enactments that promise every possible and desirable educational opportunity for all types and classes of persons.
- (2) To retain against all opposition such features of the State School Laws as have been found to be meritorious.

To secure either or both of these needs, the weight of public opinion is essential. Your committee are gratified to report that the wise and beneficent provisions of the school laws of 1916, 1922, 1927, have not only been retained wholly intact, but have, by subsequent amendments, been strengthened where weak places have developed in use. The Maryland State Teachers' Association has had an important role to play in the creation and maintenance of public sentiment in support of these laws.

Since our last report, the Legislature of 1931 has had an opportunity to scrutinize the public school laws. Some amendments were made, all of which are believed to promise better things. There are three outstanding contributions of the Maryland School Laws from the Acts of the 1931 legislative session.

(1) The provisions for special education of handicapped children have been appreciably strengthened. It is now possible to collect more accurate data concerning such children and make better provision through adequate State support for examination, classification and education of handicapped children.

(2) The compulsory school attendance laws, both for the counties and for Baltimore City, were amended so as to keep in school for longer periods all children under sixteen years of age.

(3) A year ago, the Association went on record in favor of a three year normal school course. The recent Legislature enacted such a law and it is now operative in the three white State Normal Schools of Maryland. Students who entered in 1930 will be allowed to finish the two year curriculum and receive their diplomas next spring. Provision will be made with the beginning of next school year to offer the third year of the three year curriculum, and to admit to such a course those graduates from the two year curriculum who desire to afford themselves of the opportunity inherent in the three year offering. It is expected, therefore, that in 1933 there will be graduated a small group who will have had the full three years' work.

The 1931 Legislature enacted such other provisions as changing the lower age of the school census from six to five years; increasing the size of a lot which a county board of education may acquire for school purposes from five to ten acres; authorizing county superintendents to allow the use of public school houses by the Veterans of Foreign Wars, United Spanish-American War Veterans, and other regularly incorporated and recognized veterans associations, in addition to the organizations already specified in the school law; while by-laws of the State Board of Education have been changed with regard to substitute teachers, tuition to adjoining counties and to regulations governing college courses in education for high school teachers.

Respectfully submitted,

Nicholas Orem
Dr. Angela Broening
Mrs. Marian Veasey Parkhurst
W. J. Holloway, Chairman,
Prin. State Normal School, Salisbury

The Committee on Resolutions of the Maryland State Teachers' Association present to the Association the following report:

1. The Association expresses the thanks and sincere appreciation of the

entire body to Dr. David Weglein, Superintendent of Schools, Baltimore City, and to the Board of Education of Baltimore City for extending the generous hospitality of the city to the Association and to the individual teachers of the State in providing abundant facilities for the various association meetings and in opening the schools of the city for the observation of instruction.

2. We extend thanks to the President of the Association, Miss Helen M. Johnson and to the Executive Committee for providing a program, interesting, well-balanced and educationally constructive, looking to the enhancing of interest in current problems of education, to stimulating enthusiasm for their solution, and to inspiring confidence in a modern progressive education program. We deeply deplore the absence of the President caused by her illness and extend to her our sincere and earnest wishes for speedy recovery.

3. Recognizing the profound importance of well-trained teachers as a prerequisite to the highest development of the public school system of the state, we commend the legislation which extends the length of the Normal School curriculum from two to three years.

4. We deeply mourn the loss from this body and from the state school system of Mr. Lloyd Palmer, faithful and efficient superintendent of schools of Frederick county, a former president of the Maryland State Teachers' Association, a staunch supporter of public education, a sincere and loyal co-worker and friend.

5. We desire highly to compliment and sincerely to thank Miss Margaret Collins, of the Public School Association of Baltimore City and Miss Theresa Wiedefeld, of the State Department of Education for the efficient management of the very successful State Teachers' dinner, held in connection with the State Teachers' Association meeting and recommend its continuance in future years.

6. We express our appreciation to Governor Albert C. Ritchie for his continued keen interest in public education and for his active support of the state program.

7. We express our appreciation to Dr. Albert S. Cook, State Superintendent of schools for his untiring efforts in the efficient administration of the State School system.

Charles L. Kopp, Chairman
Ida Belle Wilson

REPORT OF THE COMMITTEE ON TEACHERS' PENSIONS

The Committee again reports with pleasure the very satisfactory way in which the State Teachers' Retirement System of Maryland is working. It is an established part of the school system.

With the provision for the Retirement System of Maryland a regular part of the school law, a special committee of this Association to work to

establish it has no further office to perform. The committee now feels its services are no longer needed.

Approval is asked for the resolution below.

Resolved, That the Maryland State Teachers' Association, at its regular meeting on October 24th, 1931, discontinue the Special Committee on Teachers' Pensions.

Respectfully submitted,

M. S. H. Unger

T. G. Bennett

E. W. Pruitt

David E. Weglein

Edwin W. Broome, Chairman

REPORT OF TREASURER

DR. R. BERRYMAN

November 27, 1931

In Account With

MARYLAND STATE TEACHERS' ASSOCIATION—DR.

1931

Nov. 24—To balance First National Bank.....	\$1636.59
To received from Walter H. Davis, county membership.....	2597.00
To received from Baltimore City, membership.....	1078.00
To received from Towson State Normal School.....	48.00
To interest on mortgages.....	220.00
To interest on Bank Account.....	39.98
To Woodland C. Phillips, Howard County.....	20.00
To James B. Noble, Dorchester County.....	15.00
To E. M. Noble, Caroline County.....	20.00
To B. J. Grimes, Washington County.....	25.00
To Lettie M. Dent, St. Mary's County.....	15.00
To Nicholas Orem, Prince George's County.....	25.00
To Louis C. Robinson, Kent County.....	25.00
To Edwin W. Broome, Montgomery County.....	30.00
To Howard T. Ruhl, Cecil County.....	25.00
To C. Milton Wright, Harford County.....	15.00
To J. C. Biehl, Frederick County.....	15.00

\$5849.57

Nov. 24, 1931—Assets

To Balance First National Bank.....	\$2288.75
To Mortgages—Mortgage Guarantee Co.	5000.00
Special Fund—To Mortgage—Mortgage Guarantee Co.	1000.00
To Balance, Savings Account.....	527.88

\$8816.63

1930

Nov. 24—To stenographic work—1930.....	\$ 40.00
To stenographic work—1931.....	10.00
To Hotel Rennert, Executive Committee, Speakers, etc.....	110.10
To Paper, supplies, etc.	10.80
To Democratic Ledger, programs, proceedings, etc.....	1034.40
To Margaret S. Upham, executive committee.....	40.00
To Refund	1.00
To Walter H. Davis, salary and expenses, secretary.....	283.94
To R. Berryman, salary and expenses, treasurer.....	150.07
To mailing proceedings.....	112.00
To N. E. A. Membership.....	80.00
To Baltimore Chair Co.	28.00
To Title Guarantee & Trust Co.	4.00
To Torsch Franz, 200 badges.....	20.00
To expenses Baltimore City College and Baltimore Polytechnic	23.50
To Maryland High School Orchestra.....	221.17
To Lord Baltimore Dinner.....	151.75
To Flowers, Helen M. Johnson.....	24.50
To W. A. Jessop.....	500.00
To Edward L. Thorndike.....	200.00
To J. Cayce Morrison.....	140.82
To Arthur Dardineau.....	125.00
To Dr. Dora Smith.....	40.00
To Marian Clark	40.00
To Hazel McDonald.....	66.71
To J. A. McCarthy.....	15.00
To Lydia J. Roberts.....	40.00
To Ruth Evans	40.00
To Charles W. Sylvester.....	8.06
Total expenses.....	\$3560.82
Nov. 24/30—To balance First National Bank.....	2288.75
	<u>\$5849.57</u>

Respectfully submitted,

R. Berryman, Treasurer

REPORT OF AUDITING COMMITTEE

Baltimore, 1930

To The Maryland State Teachers' Association:

Your committee has examined the books, cancelled checks, vouchers, etc., of the Treasurer and find them to be correct. We have also examined the

mortgages held by him for the association and find them as stated in his report.

Ernest J. Becker
C. B. Edgeworth
Judson Hunt

ART SECTION

BALTIMORE CITY COLLEGE—Friday, October 23

Miss Mary H. Chrissinger, presiding

The Art Section which held its meeting (Room 339) in Baltimore City College, on Friday, October 23rd, 1931, showed definite growth both in interest and attendance, the room being filled beyond capacity. Approximately about 135 persons attended.

The meeting was presided over by Miss Mary Helen Chrissinger, Director Art Education, Hagerstown, Md., chairman, with Miss Helen Greenholt, Art Department, Southern High School, acting as Secretary pro tem.

The following program was carried out:

Greetings by the Chairman who encouraged the development of Art Education, suggesting the slogan "Art for All" and "All for Art"—all over the state.

Miss Leila Mechlin, secretary American Federation of Arts and Associate Editor American Federation Arts Magazine, gave a most delightful and inspiring talk, "Browsing Among Books on Art" which illuminated many new shelves and pages.

William Garrison Whitford, Chairman Art Education, University of Chicago, gave a most interesting and instructive talk on "Observing Beauty in Nature and in Art," showing the value of visual aids and the duty of the teacher to open the eyes of all pupils to the appreciation of beauty.

Miss Louise Adams Mann, Supervisor of Art Education, Baltimore, Md., gave a "Brief Survey of Recent Developments in Art Education in the State," which was both graphic and stimulating to further efforts in its development in new fields.

The election of officers for the coming year culminated in the re-election of Miss Mary Helen Chrissinger, Hagerstown, Md., as Chairman for 1932, and Miss Lena A. Picker, Asst. Supervisor of Art, Jr. High Schools, as secretary.

A motion was made and carried that Resolutions be framed, commending the State Board of Education for the steps it has taken in making provision for more adequate opportunities for the development of Art teachers at the Maryland State Normal School at Towson, Md., and at Johns Hopkins University.

A copy of the same to be forwarded to the State Department of Education from the Art Section, also a copy to be entered on the minutes of the organization.

In connection with the meeting an exhibition of very interesting Textiles from Baltimore City Elementary and Secondary Schools was on display, also work from the Art Department at Baltimore City College which attracted much attention.

CLASSICAL SECTION

CITY COLLEGE—Friday, October 23, 1931

Dr. W. P. Mustard, Chairman, presiding

According to its past custom, the Classical Section of the Maryland State Teachers' Association met in conjunction with the Classical Club of Baltimore on October 23, 1931, at the Baltimore City College, Dr. Wilfred P. Mustard, president of the Classical Club of Baltimore, and Professor of Latin at the Johns Hopkins University, presiding.

Dr. Mustard introduced as the speaker of the afternoon, Prof. B. W. Mitchell, Ph. D., of the Boys' Central High School, Philadelphia, who spoke most entertainingly on "A Maker of Macaronic Verse."

Although Dr. Mitchell took as the chief exponent of this kind of verse, Teofilo Folengo, born near Mantua, Italy, in 1491, and who forsaking his monkish habit for a wandering and licentious life, was noted as a successful poet of Macaronic verse, he showed us by citing various bits from earlier writers, that macaronic verse had been written by Ausonius, the Latin Christian poet, born about 308 A. D., and that this burlesque form of verse, designed to make men laugh, that painted vices to be laughed at and which was the vehicle for every sort of coarse invective, continued to be quite popular for two centuries after Folengo and was initiated in France, Germany and England.

While this hybrid Latin is very hard to read, Dr. Mitchell thinks that it forms a very interesting field of investigation. Prior to Dr. Mitchell's paper, Miss Margaret Englar, Supervisor of Latin in the Junior High Schools of Baltimore, had pamphlets distributed, illustrative of the help furnished to the teachers of Latin by the Classical Investigation conducted at Columbia University by Dr. Florence Sabin.

There were present at the meeting about forty representatives from the Johns Hopkins University, Loyola College, Woodstock College and from the public and parochial schools of the city and county.

As the meetings of the Classical Section are always conducted by the officers of the Classical Club of Baltimore, there was no election of officers.

Hattie J. Adams, Sec.-Treasurer

COMMERCIAL SECTION

CITY COLLEGE—October 23, 1931

Mrs. Frances M. North, Chairman, presiding

The annual meeting of the Commercial Division of the Maryland State Teachers' Association was held on Friday, October 23, 1931, in Room 107 of the Baltimore City College, Baltimore, Maryland.

The meeting was called to order by the Chairman, Mrs. Frances D. North at 3.15 P. M. The Chairman's introductory remarks were in the nature of a welcome to the 140 commercial teachers, supervisors, commercial representatives, and interested listeners who had assembled. The minutes were called for, read and approved. In her second remarks the Chairman gave expression to the suggestion that many advantages were to be derived from a national commercial organization. The suggestion was favorably received and commented upon, but definite action was postponed until a plan of procedure could be formulated. The same speaker called attention to the existing commercial organ, the Business Section of the N. E. A.

Mr. Chester H. Katenkamp of the Forest Park High School made the announcement that the University of Baltimore was offering a curriculum of commercial subjects in her school of practical studies. The course is especially designed for students who wish to continue college education in the field of commercial education. The time required for completion of the day course is four years. The length of time necessary for completion at night has not yet been determined. The course leads to a B. S. degree in Business Administration. Full particulars may be obtained at the University.

In the absence of further announcements the Chairman then introduced the speaker in whose hands had been placed the professional part of the meeting. Mr. Harold Smith gave as a title to his paper, "Teaching and Testing Transcription Skill." In his address there were four large headings which he developed carefully and length. They were: (1) The process of Transcription; (2) The objectives in Transcription; (3) The teaching process in Transcription; (4) Transcription standards. Under the first topic were treated: Interpreting shorthand notes for meaning, association of meaning with conventional forms in English and typing, and physical translation of meaning into typed form. His second topic analyzed skill in terms of speed, accuracy, and fluency. Standards were set up in shorthand reading speed, transcription speed, and transcription accuracy, based on four semesters. In his development of the third topic, Mr. Smith emphatically asserted that no matter what the method it must combine a presentation, preferably by the teacher, of correct reading for meaning at as high a level of skill as the student can hope to attain initial success. On this point he also emphasized the desirability of simple matter of short length at first, followed by more difficult matter requiring longer sustained efforts. The last idea showed the need for developing standards in the basic transcription process and in its parts, and developing standards of production under office specifications. The applause accorded the speaker revealed general satisfaction with his sincere efforts.

The Chairman called for the report of the Nominating Committee, which committee submitted the name of Miss Mary E. Bailey, Berlin, Md., for Chairman, and Miss Katherine Bowersox, Mt. Airy, Md., for Secretary. Both were elected unanimously.

A motion for adjournment was made at 5:00 P. M.

Respectfully submitted,

Carroll S. Rankin

EDUCATIONAL AND VOCATIONAL GUIDANCE SECTION

BALTIMORE CITY COLLEGE—October 23, 1931

Miss Mary T. McCurley, Chairman

The annual meeting of the Maryland Vocational Guidance Association was held in conjunction with the Maryland State Teachers' Association on Friday, October 23, 1931. This year our meeting was divided into two parts.

The first was a luncheon meeting, which was given at the Huber Memorial Church at noon. Dr. O. Latham Hatcher, President of the Southern Women's Educational Alliance was the speaker. As the chairman of the National Vocational Guidance Association Committee on Rural Guidance, her message was of especial interest to those present from the County, who numbered half of the sixty percent. Dr. Hatcher said that 35 percent of country young people or perhaps 50 percent will come to the city and thus become a city problem in adjustment. She also gave a short summary of what has been and is being done in the different states, mentioning the state departments of guidance in Ohio, California and Pennsylvania, and of county wide program in North Carolina.

A few questions were asked and a few remarks made and the meeting then adjourned until 3.15 in the afternoon when the second half of the program was continued at the Baltimore City College.

The minutes of the year's meetings were read and accepted.

The discussion of the luncheon meeting was then continued for a short while, after which Mr. Robert Thompson of the State Vocational Education department gave the results of a questionnaire sent to all high school principals in the state on the subject of guidance. The results were most worthwhile and the interest of the principals was evidenced by an unanimous affirmative reply to the question of whether they desired more information. Mr. Otto K. Schmied, principal of the Baltimore Evening High School, then spoke of how the principal worked with the counselor in an evening high school. He felt that because of the enormous numbers at registration time, the counselor was able to function least when needed most. In assisting the making of schedules for second year students and in interviewing the previous year, the graduates of the coming year, the counselor was of great service. Mr. Schmied also gave other means of guidance which his school used.

Reports of the treasurer and the standing committees were read.

About sixty people were present at the afternoon meeting. The election of the following officers was followed by adjournment: President, Miss Mary T. McCurley, Goucher College, Baltimore; vice-president, Mr. Robert Thompson; secretary, Mrs. Allena Baker, Girls' Vocational School, Baltimore; treasurer, Mr. Irwin Medinger.

ELEMENTARY SCHOOL PRINCIPALS' MEETING POLYTECHNIC INSTITUTE—MUSIC ROOM

October 23, 1931

Eva E. Gerstmyer, Chairman

Number of persons attending section meeting: 200. (This is all that room would accommodate. A great number had to leave.)

The following program was presented:

I. The Importance of the Principalship—Dr. Florence Bamberger, chairman, College for Teachers, Johns Hopkins University.

II. Principals' Procedures:

1. For Professional Growth of Teachers in Service:

A rural school—Miss Catherine Futterer, Hagerstown, Maryland.

A city school—Miss Mary Sultz, Principal School No. 97, Baltimore.

2. For Desirable Relationships to Community Organizations:

A city school—Miss Minnie Glantz, Principal School No. 99, Baltimore.

3. For the Care and Maintenance of the School Plant:

A city school—Miss Emily Eversfield, Principal School No. 87, Baltimore.

III. Summary—Miss Stella Brown, Maryland State Normal School:

Judging from the papers that have been so ably presented, it is evident that the position of the principal of an elementary school is one of the most important in any school system.

Although a principal must be an administrator the progress of any school depends primarily upon the supervisory program that is in operation. The type of personality holding the principalship determines the success of the program. The ideals and standards of achievement in a school are usually the outcomes determined by the principal co-operating and working with the teachers. This means that every school will determine the thing that it can do best and develop it to a maximum degree. As a part of the co-ordination plan, every principal should inform the superintendent and supervisors of the special features of his school. The dignity and success of a principal are dependent upon his professional growth. Some of the best

ways that were suggested for achieving continuous growth were through study that is necessary for effective participation in professional activities. Demonstration lessons, faculty meetings, curriculum construction and development of library facilities were indicated as profitable means for professional growth.

A successful principal must be a leader in the community and a person with a "teaching pride." One must be acquainted with all organizations actively engaged in the interests of the community. In fact, a principal should be among the most respected citizens of any community.

The supervision of a school plant is closely related to a program of classroom instruction. Special attention should be given to sanitation, orderliness, beauty and care of public property. While all of these are most important, there has been a tendency to overlook the care of public property. If parents, teachers, and children could improve this condition, we might have more funds to supply materials of instructions or even increase teachers' salaries.

The Elementary School Principalship of the future will be the key position in the supervision of elementary schools. He must know elementary education. The principal must be a student imbued with the spirit of scientific inquiry in the continuous problems of the school. The principal must be a person with vision, a spirit of tolerance but something greater than tolerance, one of sympathetic intelligent understanding; one who is unafraid to study and analyze all economic, social, political and religious problems that concern society.

ENGLISH SECTION

Maryland Chapter of the National Council of Teachers of English

CITY COLLEGE—October 23, 1931

Dr. Francis A. Litz, Chairman

This section met at the Baltimore City College, October 23, 1931, at 3.15, Dr. Francis A. Litz, Head of the English Department at the Western High School, presiding. The persons present who were not members of the National Council were invited to become active members of the Maryland Chapter. Active membership consists in receiving materials distributed by the Program and Publicity Committee; attendance, if possible, at the two annual meetings, one of which will be held in connection with the Maryland State Teachers' Association meetings in October; and the payment of \$.50 annual dues.

Dr. Dora V. Smith, Associate Professor of Education, University of Minnesota, and specialist in English with the National Survey of Secondary Schools, spoke on "Tendencies Evident in the Making of Courses of Study throughout the Country." She stated that the complete results of the survey in English would be published in a government bulletin early in 1932, and that therefore she would mention only the most important facts. She commented very favorably upon her findings on her visit to the Baltimore



MISS HELEN M. JOHNSON, President

Public Schools in 1931. In her address she presented the scope of the survey, the bases on which the analysis was made, the major trends which the survey discovered, and the implications for consideration in any curriculum revision.

She explained, first, that the survey was representative of current practice throughout the country. It covered thirty-three states; included cities of less than 2,000 to more than 6,000,000; extended from Seattle to Richmond, Va., and from Los Angeles to Cranston, R. I.; and examined 156 courses of study in English. All of these had appeared since 1925 and more than half within the past two years.

The analysis of the English work consisted of an examination of the courses of study and observations of the existing practices in many schools. It was concerned with the following points:

1. The relation of the objectives in English to the general objectives in education. Most of the courses of study showed no relation between the two; only 14 out of 156 had any relation.

2. Time allotments—hours per week, distribution of time between literature and composition, and amount of time given to various phases of composition.

3. Aims of instruction in all phases of English.

4. Methods of teaching.

5. Elective courses.

6. Grammar, minimum essentials.

7. Text books most used, selection of "classics," and grade placement.

8. Literature—organization by theme, type, or set "classics"; practice in American and English; supplementary reading; content, literary or work-type.

9. Library practice.

10. Correlation of English with other subjects.

11. Provision for individual differences.

In the brief time of the meeting Dr. Smith could not give the findings on all of these topics, but she did point out the most important trends.

There was a tendency, in certain places, to offer English five hours a week in grades 7-9. This reduction was cared for by having all departments in a school equally responsible for forming correct speech habits. Pittsburgh had a well organized plan for this. At the beginning of each year all teachers of a school agree upon certain habits to be enforced during the year. After that every teacher is as responsible as the English teacher for developing the correct habits.

In composition the aim in courses of study was to teach the funda-

mentals of expression. Relatively few places stressed style, forms of discourse, and rhetorical principles; most emphasized English as a tool of thought for public and private life, not as an artistic outlet. The activities listed were to fit pupils for the oral and written activities of every day affairs and emphasized conversation and letter writing. However, Dr. Smith's observation of the teaching in several cities revealed greater emphasis upon drill exercises in the mechanics paralleled by work in grammar than upon opportunities for pupils to find ideas and how to present them. There was little attempt to stimulate boys and girls to observation and interpretation of the life about them, little effort to give them ideas to express. Some encouraging situations, though, showed training in "conversation"; others, in composition planning.

Some courses of study were organized around seven functional centers. These were set up from the scientifically discovered needs of English in every day life as given by Johnson in his study, "English Expression"* and consist of ability in conversation and discussion; giving directions; making announcements, reports, speeches; telling stories; letter writing: word study, and spelling. Some places have a definite amount of each topic each year; others different topics in different years. The trend was to teach grammar for its functional value and to give "as much as is needed to improve speech." However the amounts given varied widely. Dr. Smith said that the only way to determine what amount was necessary to improve speech was by scientific, experimental investigation. In line with teaching grammar for use was the very general tendency away from Latin classifications toward classification by function.

Everywhere the agreement was unanimous that there is not enough time to do all the things set down in courses of study. Dr. Smith's comment was that any reduction will depend upon a thoughtful determination of the relative values of the various topics of English in the light of the philosophy of the entire system and of English teaching in particular.

In evaluating a course of study in literature, Dr. Smith said she used Bobbitt's statement of the function of literature; viz, "the enrichment of experience." The examination revealed a discouraging list of required titles, for the most frequently recurring titles appear on the 1890 college entrance requirement list. However the hopeful trend, consistent with the criterion, was the practice of the extensive rather than the intensive method of reading literature. The new organization was of the unit type, and the program, unified for a month or more, was centered around a common theme or a single literary type. The class of book used was a compilation, for example, an anthology of poetry rather than a single book containing two poems to be "studied" for several weeks. The tendency also was to use ten copies of four different books rather than forty copies all of the same book.

The idea of free reading or directed reading was developing in the West. This plan aims to have pupils bring into school whatever they are reading on the outside. The procedure in the class room is the conversational give and take of life; there is nothing of the "book report" attitude. Ob-

viously, the success of the plan depends upon the skill of the teacher through suggestion and encouraging comment to raise the taste of girls and boys from where they are to where they ought to be.

The biggest problem everywhere was the care of the bright child, the less bright, and the dull with no background of culture. Three plans are in use: to give the weak a longer time for the same thing while the brighter child does more reading; to give different forms of the same material, for example, the bright to read "Odysseus," the average to use "The Children's Homer," the dull to read classic myths; or to give entirely different work to each group, the weaker group to have something they can understand but with enough interest to lead to further reading. It was generally conceded that vocational informational content did not lead to reading habits for weak pupils. In this connection it was interesting to note Dr. Smith's findings in the text books used. An examination of the titles and observation of the practice in schools showed that no one title appeared on every list. No single literary classic was read in common by more than one-third of the children, and the classic most frequently read appeared only fifty-seven times. It is evident that the idea of a single literary classic is a myth.

In speaking of the implications in the survey for consideration in any curriculum revision, Dr. Smith stated that the government is merely a fact-finding institution; hence the survey only reveals common practices and points out the most noticeable trends both discouraging and encouraging. She emphasized the fact that any new policies must be initiated through the local community making or revising its course of study. She also said that worthwhile curriculum revision will be brought about by the intelligent interest and honest cooperation of all teachers to enrich the lives of the boys and girls in school.

The marked attention of the audience during the talk, and the enthusiastic applause at the close, as well as the questions asked by numbers of people who spoke to Dr. Smith after the meeting, all indicated the pleasure and stimulation in her report. Dr. Smith's charming manner added much to her very clear and delightful presentation. Before the meeting adjourned Dr. Litz gave an opportunity to all non-members present to join the Maryland Chapter either by the payment of the annual dues then, or by signing cards indicating their desire to join with payment of dues later.

The meeting adjourned at 4.15.

Respectfully submitted,

Caroline L. Ziegler, Secretary

* Public School Publishing Co., 1926

GRAMMAR SECTION

Friday, October 23, 1931—3.15 P. M.

Chairman—Miss Katherine Healy, Hagerstown

Secretary—Miss Edna Devilbiss, Mt. Airy

The meeting of the Grammar Section of the Md. State Teachers' Asso-

ciation was held on Friday, October 23, 1931, at 3.15 P. M. in the Polytechnic Institute Auditorium.

Miss Katherine Healy, first presented the guest speaker, Dr. W. A. Jesup, President of the University of Iowa, who spoke on "Different Phases of the Conception of Education." He said that education one hundred years ago was mass instruction. Then followed division according to size, age and the time in school. At the present time the needs of the children are considered. The schools have changed from the opportunity for the few to the obligation for everybody. Our task, as teachers, is to find out the particular difficulties of each individual child and be able to give remedial help.

Miss I. Jewel Simpson was next presented and she gave a most interesting and instructive discussion on "Adventures in Reading." She summarized her talk by showing what literature can do for the individual who has learned to appreciate it. This was followed by an able discussion on "Philosophy Underlying Creative Activities of Children," by Mr. Edwin W. Broome, Superintendent of Schools, Montgomery County. He defined activity as an attack upon some difficulty that has lodged itself between desire and satisfaction.

The election of officers followed. Miss Katherine Healy was reelected Chairman and Edna Devilbiss, Secretary. Attendance was about 1,000.

Edna Devilbiss, Secretary

THE HISTORY TEACHERS' ASSOCIATION OF MARYLAND

Baltimore, Maryland

Joint Meeting With The Maryland State Teachers' Association

BALTIMORE CITY COLLEGE, ROOM 226

Friday, October 23—3.15 o'clock

Mr. Arch Golder, Chairman

Miss Marian G. Clark, Director of Elementary Education, Montclair, New Jersey, will speak on "Exercises in the Evaluation of Historical Materials." Miss Clark has been working for the American Historical Association Investigation under the direction of Dr. Henry Johnson, to test the ability to organize materials.

EXERCISES IN THE USE OF HISTORICAL EVIDENCE

A—Informal Tests

Not so many years ago the testing program of a history teacher consisted largely of a monthly informational test. The purpose was to discover how many facts the pupils had retained. Sometimes the purpose was still less significant. The test was to determine a "mark" for each pupil.

Since then we have traveled far. "Thought questions" became the prevailing form of test. Later, it was borne upon us that we needed to diag-

nose the thinking processes of all pupils—to discover which of several types of thinking were resulting from our teaching of history. So the purpose of testing became largely diagnostic, and its forms became many and varied.

Today we have a rich program for testing. We give informal tests to discover whether pupils can draw proper conclusions from facts. We give tests to determine whether pupils can select and group the facts necessary for the solving of a problem. We test the power to use a textbook by assigning a problem and asking the pupils to list the pages, maps and pictures which they will use in solving it. We go further than that. We assign a problem, allowing perhaps a week for the pupils to solve it from library material or reference books. Our dependence upon source material for historical information has led us to give exercises which require pupils to select sources and to evaluate items. Still another form of testing calls for the ability to compare the evidence of two courses, and, to some degree, the ability to explain divergence in such sources.

The essay form of test can by no means be cast off. The exercise of bringing together all the facts and ideas at one's command and assembling them into a clear explanation is beyond all doubt one of the valuable results of the proper teaching of history.

And so we have grown from the early conception of testing to determine knowledge of history facts, to the much more comprehensive one of testing to discover what powers to study, to think, and to weight evidence have been developed by a program of history teaching.

B—Standardized Tests in History

When we attempt to standardize tests for history, we face problems of appalling difficulty.

In 1928 the committee of the American Historical Association Investigation of the Social Studies in the Schools undertook the making of tests to be standardized. As a step toward that goal I was asked to set up a group of Exercises in the Use of Historical Evidence. This work was done under the guidance of Dr. Truman Kelly, with Professor Henry Johnson and Professor C. A. Krey as advisors. Two sets were suggested, one to be given to Grades III to VI; one to Grades VII to XVI, that is, from Junior High School through the College levels.

The exercises for the third, fourth, fifth and sixth grades are set up in three books, and those for the upper schools and for adults, in four. In each case, the first book, called Group I, contains the exercises for testing the ability to draw conclusions; the second book, called Group II, contains those for testing the ability to make proper implications from facts, and the third book, called Group III, contains the exercises in grouping facts under proper headings. In the fourth book of the advanced tests the student is asked to classify each item of evidence as (1) a specific fact, (2) a general fact, (3) an opinion of a situation, and (4) an opinion of a motive. The general character of the tests can best be understood by examples. (Examples shown on screen).

The exercises were given to 2,000 students selected on the basis of (a) a wide range of background, (b) the full scope of the grades.

The results were sent to Dr. Kelly for statistical evaluation. The plan was to select from each of the groups those questions which resulted in the best "profile," that is, those which showed a fairly regular increase in the number of correct responses from grade to grade.

The results showed a justification for at once organizing an elementary test selected from the three forms, and the need for further experimentation on the exercises for the upper levels. These exercises have evidently attempted too wide a range and should be set up in two groups, one for grades VII to XI inclusive, and one from XII to XVI. The results also suggest that in Group I some of the evidence was so long as to make it impossible for most students to make proper use of it in the length of time available for testing purposes.

HOME ECONOMICS ASSOCIATION SECTIONAL MEETING

CITY COLLEGE—October 23, 1931

Miss Elisabeth Amery, Chairman

Two hundred Home Economists from all parts of the State and City attended the Home Economics section meeting in the cafeteria of the City College on Friday, P. M., October 23. Many dietitians from the city hospitals and high schools were in attendance, attracted by the speaker, Dr. Lydia J. Roberts, who is regarded as one of the foremost investigators in child health and food for children. Dr. Roberts has made many studies of school lunches and their function in school health programs.

The entire program time was devoted to the illustrated talk by Dr. Lydia J. Roberts, head of the Home Economics Department of Chicago University. She told of studies conducted and findings on school lunch problems, and gave definite recommendations for the improvement of this important school activity.

Following the lecture, short talks on plans for the association were given by chairmen of standing committees:

Membership—Elizabeth Shantz (Baltimore).

Publicity—Winifred O'Dell (Baltimore).

Student Clubs—Elizabeth Deffenbaugh (Westminster).

The officers of this section are elected at a spring meeting of the Association, as this fall meeting is devoted to professional improvement, so therefore, the list of officers remains the same as this year.

Secretary, Helen Weber, Western High School, Baltimore

REPORT OF THE ANNUAL MEETING OF THE INDUSTRIAL SECTION

Of The Maryland State Teachers' Association

The annual meeting of the Industrial Section of the Maryland State

Teachers' Association was held in Room 207 of the Baltimore City College on Friday, October 23, 1931, and called to order by the President, Mr. Paul A. Willhide, promptly at 3.15 P. M.

Due to the illness of the Secretary, Mrs. Cecile B. Colbert, Miss Ethel S. Crew of the Girls' Vocational School acted as secretary, pro tem.

There were 170 teachers of industrial arts and vocational subjects present.

The general business of the section was then carried on—reading of minutes of previous meeting and election of officers. The following officers were elected for the coming year and presented to the group.

President—Mr. Max Chambers, Instructor of Industrial Arts, Federalsburg High School, Caroline County, Maryland.

Secretary—Mr. Lewis M. Kirby, Instructor in Mechanical Drawing, Gwynn's Falls Park Junior High School, No. 91, Baltimore.

The Address was delivered by Mr. John A. McCarthy, Assistant For Trade and Industrial Education in the State of New Jersey, his subject being "The Objectives of Manual Training, Industrial Arts and Vocational Education in the State of New Jersey."

Mr. McCarthy said part: "One of the chief objectives of Industrial Arts is the development of the individual, whether in school, on the athletic field or in the gymnasium. We are to look out for industrial tools and processes, so that the individual will have an appreciation of the value of work." He gave us four objectives in Vocational Education:

1. Development of Trade Skill.
2. Development of Technical Knowledge.
3. Development of those Trade Habits and Trade Skills as will make the individual an acceptable member of the industrial organization.
4. Development of citizenship training for community life.

"It is just as important to train them in right habits, in punctuality, in posture, in honesty, in obedience, conversation, loyalty and job pride, as the maximum of trade skill. If he has trade skill and lacks these elements, he will not be long retained in that organization and will be another problem for adjustment and placement. The relative importance of trade skill, as with technical knowledge, will depend on the trade."

Mr. McCarthy gave in detail the Extension Program in New Jersey, the training Evening School Teachers and the work in the Evening Trade School stressing the point of Industrial Morale as one of the objectives of the Evening School.

The General Meeting then adjourned dividing in two groups consisting of the teachers of Industrial Arts and Vocational Education.

The meeting of the Industrial Arts section was called to order by Mr. William F. Haefer, Head of Industrial Arts Department, Baltimore City College at 4.00 P. M., there being approximately 70 members present.

Mr. William Feddeman, Instructor of Industrial Arts at the Takoma-Silver Springs High School was the first speaker. His subject was "In-

crease in Shop Activities for the Problem Child in the Junior High School." He discussed with the group the necessity of dealing with these students and how the situation is dealt with in Montgomery county. The diversified shop being the means of coping with the situation.

Mr. G. Norman Anderson, Head of the Department of Practice at Baltimore Polytechnic Institute read a paper on the Preparation in Industrial Arts of Elementary and Junior High School Pupils for Entrance into the Technical Senior High Schools. Mr. Anderson stressed the point that the Elementary and Junior High School Curricula should not attempt to specialize in industrial training but should make the shop work general. This would allow the high schools and vocational schools to specialize and build an effective course.

The meeting of the Trade Teachers section was called to order by Mr. Paul A. Willhide, General Chairman of the Industrial Section and Instructor of Mechanical Drawing, Boys Vocational School at 4.10 P. M., there being approximately 35 members present.

Mr. J. B. MacBride, Head of Industrial Education Department, Sparrows Point High School, Sparrows Point, Maryland, was the first speaker. His subject was the "Trends in Vocational Education in Baltimore County." He set up an ideal situation for the teaching of Vocational Education and then briefly defined the plans of Baltimore county stressing the point that the major work in his school was industrial while the major part of the county was agricultural in nature.

The second speaker was Mr. Howard E. Ziefle, Instructor of Electrical Laboratory Practice, Boys Vocational School, Baltimore. His subject was, "The Articulation of Related and Shop Courses in the Vocational School Curriculum." Mr. Ziefle stated in part that the relocation of the Boys Vocational School three years ago presented an excellent opportunity for efficiently organizing the trade courses. The shop teachers coordinated their efforts and set up revised curricula with due consideration to new quarters, new equipment, new trend in industry, etc. With the shop courses having been set up, the problem of correlating the related subject matter was worked out by building around the shop courses. Each unit of related work was designed as a definite function of the shop work as far as was practical to do so.

Both meetings adjourned at 5.20 P. M.

Respectfully submitted,

Ethel S. Crew, Secretary Pro-Tem

KINDERGARTEN-PRIMARY SECTION CLIFTON PARK JUNIOR HIGH SCHOOL

October 23, 1931

The Kindergarten Primary Section of the Maryland State Teachers' Association met Friday, October 23, 1931, at 3.15 P. M., in the auditorium of the Clifton Park Junior High School, Baltimore, Maryland. The meeting

was opened by Miss Eleanor Shank, chairman. The minutes of last year's meeting were read and approved.

The topic of the meeting was, "Reading in the Primary Grades." Several months previous to the meeting, questionnaires had been sent to all city and county schools, asking for reading problems teachers wished to have discussed. These problems were grouped under two headings.

The first group of problems was presented by Miss Marguerite Frush, Primary Supervisor of Baltimore City, under the title, "Fitting Reading to the Child's Growth."

The second group of problems was presented by Miss Vera Pickard, Primary Supervisor, Anne Arundel county, Maryland, under the title, "Tools in Reading," which included phrase and word study, seatwork and phonics.

The problems were then discussed by Miss Hazel Jones, Reading Instructor, Maryland State Normal School, Towson, Maryland.

Miss Jones said that reading was receiving more recognition than ever before; that it was a subject which tied up with almost every activity of the day and every subject in the curriculum; and that we must have a broad vision of the child's experiences and needs in terms of this background and the goal towards which he is striving.

Miss Jones brought out the fact that many parents and teachers hinder the child's growth because of their attitude towards grade placement. They think the child should read a book designated for the grade he is in, but children do not always read according to the books marked first, second, or third grade, but rather, according to the reading level they are in. The causes of this are:

1. Even today, readers are not as carefully graded as they should be.
2. Classrooms in the primary grades are often overcrowded, and some children slip by without the teacher having an accurate understanding of each child's ability.
3. Lack of regular attendance.
4. All children do not progress at the same rate.

Grade placement and grade standards are essential, but we must also consider the individual child's need.

The levels, or stages of reading, through which the child passes, were given as follows by Miss Jones:

1. In the first level, children read charts based upon their own experiences. By so doing, their first associations with reading are pleasant and tie up real experiences to the printed symbols. In the reading of these charts, children get meaning, proper eye habits, and certain mechanics of reading.

2. In level 2, the children are given a book. They must learn the techniques of handling a book, and to tie the author's ideas to the printed symbols. The type of content to be read is very important. Books containing simple, factual material, with only a few lines on a page are best. In this level, the habits of Level 1 are still worked upon.

3. In level 3, the children now become conscious of the smallest unit of thought, the word. They should be able to do this without losing the thought of the sentence. Before a story is read, we need only to tell a part of it in order to arouse interest. In this level, supervised study is better than independent study at seats.

4. In the 4th level, the child begins to feel some independence and increases his rate in reading. There is a refinement of habits and techniques. This can be brought about by reading a great amount of easy material. This is the place to introduce phonics, as it helps to increase efficiency in reading.

5. In level 5, the child reads voluntarily, with interest and absorption.

In answering the problems presented by Miss Pickard, Miss Jones brought out the following points:

1. In phrase and word study, do not stress the difficulties the child will meet, but rather discover them in his study. Keep a list of the difficult words and phrases, and determine the need for drill upon their frequency in the book, and the placement in the Gates word list.

2. In regard to phonics, Miss Jones said that some training is necessary, and that the time to begin is after the child has reached the end of the third reading level, or the beginning of the fourth, which is usually some time during the first half of the first year. More harm can come from giving training too early in phonics than waiting until later to start the teaching of phonics. The importance of using key words for sounds and families was stressed.

3. With seatwork, Miss Jones urged that we help the child to realize the need and purpose for the exercise. In order to improve in his work, he should compete with himself, and not with the group. Give him pieces of seatwork to do which are tied up with the reading he is doing, but also have much extra work around from which the child himself may select things to do. An extra seatwork table was suggested, to which the child might go and get colored paper, pictures to color, puzzles, old spools, paste, scissors, or unprinted news for drawing. Some of the best work is done at this time.

In summing up the points of the discussion, an attempt was made to show the use of "Reading Tools" and the importance of "Fitting Reading to the Child's needs and growth stages, rather than first trying to fit the child to the reading goals. That is—first ask yourself, "In what stage of learning is this child?"—not, "Where should this child be?" Begin to build at the level in which you find each child.

Officers elected for 1931-32:

Chairman—Miss Grace Naumann, Demonstration Teacher, Grade 1, School 44, Harford Road & 32nd St., Baltimore, Md. Home address 2027 E. 31st St., Baltimore, Md.

Secretary—Miss Clara Crockett, Practice Teacher, Grade 1, School 51,

34th & Frisby Streets, Baltimore, Md. Home address 1723 Chilton St., Baltimore, Md.

Sara M. Reese, Secretary

LIBRARY SECTION

CITY COLLEGE—October 23, 1931

Report of the Library Section, The Maryland Public Library Advisory Association and the Maryland Library Association.

The meeting convened at 1 P. M. in the Library of the Baltimore City College, Dr. Joseph H. Apple, President of the Commission in the chair. Approximately 200 were in attendance. No business was transacted.

The first speaker was Miss Hannah Severns, Public Library, Moorestown, New Jersey—"Librarians, Dead or Alive."

Miss Mary S. Wilkinson, Director of Work with Children, Enoch Pratt Free Library—"Here, There and Everywhere in Children's Books."

Dr. Joy Elmer Morgan, Director of Division of Publications of National Education Association, Washington, D. C.—"The Library and The School."

Miss Adelene J. Pratt, of The Library Commission, is President of the Maryland Library Association.

Mrs. M. A. Newell, Secretary

PARENT-TEACHER SECTION

Baltimore, October 23, 1931

Number attending session—thirty-three.

Presiding—Rev. Kingman A. Handy.

Speaker—Dr. Cloyd Heck Marvin, President, The George Washington University. Subject—"Education and International Affairs."

Discussion—Led by Mrs. T. J. Carruthers, Normal School, Salisbury, Maryland.

Officers for this year:

Mrs. Ross Coppage, President.

Mrs. Fred H. Cook, Recording Secretary, 2940 Harford Road, Baltimore, Maryland.

Pearl E. Podlich, Cor. Secretary

MUSIC SECTION

CITY COLLEGE—October 23, 1931

The meeting was opened by the Chairman, Miss Hazel MacDonald. Secretary's report was read.

Business Meeting:

1. A motion was made and carried to create a new office of Vice Chair-

man, which should be filled automatically each year, by the retiring Chairman.

2. The following officers were elected:

Chairman—Miss Genevieve P. Butler, Forest Park High School, Baltimore, Maryland.

Vice Chairman—Miss Hazel MacDonald, Maryland State Normal School, Towson, Maryland.

Secretary—Miss Margaret Benson, Catonsville High School, Catonsville, Maryland.

Mr. John M. Denués, Director of Music Education in Baltimore City introduced the speaker, Dr. Victor L. F. Rebmänn, Director of Music of Westchester County, White Plains, New York. Dr. Rebmänn spoke on the "Results and Attainments That May Reasonably be Expected from a Music Course in the Public Schools."

Dr. Rebmänn called our attention to the following values of music in human experience.

1. Physical. Music appeals to the ear and develops the sense of hearing. In recent education, this sense has been made secondary to sight. Education today fails to make sufficient use of the ear. It was pointed out that ear training such as a musician receives, is valuable not only in the sphere of music but in preparation for scientific work which has to do with sound.

2. Emotional. Because psychologists and educators believe that our acts are governed primarily by how we feel rather than by what we know, modern education attempts to develop self-control. Music, with its tendencies to restrain, to refine and control emotions, is an effective means to this end.

3. Aesthetic (a refinement of the emotional side). The aesthetic response would be the pleasure resulting from a piece of music because of itself, or its own intrinsic value, rather than because of some external association connected with it. Dr. Rebmänn stressed the need to regain the art of reflection which music can so ably assist in doing.

4. Social. Singing, playing or listening to music in groups tends toward friendliness, team work and the socializing of every member in the group.

5. Skill. The skill attained, in playing instruments or in the use of the singing voice through successful drill, will produce satisfaction and develop power and pleasure in good music. Enjoyment received from mere skills and habits is not all we desire; we must have love and respect for music as well.

Dr. Rebmänn listed certain ways of attaining the results that may be expected from a music course in the Public Schools. He said, first, through singing because more individuals will participate in vocal music; second, through instrumental music because it is a doing job; and third, through appreciation. Any sane music course must have all three.

1. Song Singing. We must have a great amount of song singing, for

its beauty or aesthetic value. There must be a modicum of music reading in school from the second to the seventh grades, otherwise the music in the Junior High will break down. Music reading needs expert guidance in the beginning; it needs patience on the part of the teacher, and efficient teaching at all times.

2. Instrumental music. The best instrumental methods will most likely grow out of class instruction in the public schools.

3. Appreciation. Music should be heard from the first to the twelfth grades and should be in keeping with what children can appreciate each year.

After Dr. Rebmann's talk, an open discussion was held in which music problems and questions were presented for his consideration. A few of the questions with his answers follow:

1. How is it possible to stimulate interest in instruments other than violin or piano?

In answering this question, he cited an example from his own experience. He first made a survey of pupils who had received instruction in some instrument. He found that a large majority had been instructed in violin or piano, most of whom were not successful in the playing of either instrument. His next step was to hold a conference with these unsuccessful players and their parents, urging that the children try other instruments. An instrumental specialist advised each child what instrument would be best for him to play. The parents followed this advice and in a period of two years, he had a well-balanced orchestra.

2. Do you have individual or class instruction of instruments?

All class instruction—strings together, brasses together and woodwinds together.

3. How do you develop vocal music in boys' technical high school where there has been no background of music?

Start with their interests or on their level in music and gradually raise the standard.

Annetta Yates, Secretary

PHYSICAL EDUCATION SECTION

CITY COLLEGE, October 23, 1931

Dr. Wm. Burdick, Chairman

Addresses were delivered by Dr. Leo V. Schneider, medical examiner of the Playground Athletic League and by Miss Ruth Evans, Assistant Director of Physical Education, Springfield, Massachusetts. The addresses are printed herein.

COLOR BLINDNESS AMONG HIGH SCHOOL STUDENTS

Leo V. Schneider, M. D., Baltimore, Md.

The color vision abnormality known generally as color blindness, has been given considerable attention since 1798 when it was discovered that the great English chemist and mathematician John Dalton could not distinguish colors. It was due to Dalton's inability to perceive differences of colors that color blindness was known as Daltonism and his defect actually led the attention of scientists to the analysis of the sensation of the color blind. Though it has long been known that many men show peculiarities of color vision distinguishing them from normal, the question of color blindness has reached today an importance that it has never attained before. Years ago it was considered of importance only to those engaged in marine and railroad work. Today with traffic signals of red and green lights seen practically everywhere, and with a large majority of people interested either as drivers or passengers, the condition must be looked upon as a serious one and the color blind should be classified as potentially dangerous. Color blindness is now generally assumed to be of a hereditary nature, usually affecting both eyes, the function of the eyes being otherwise normal. A number of cases of unilateral congenital color blindness has been reported in the literature but it is doubtful if any of them were really congenital. There are a number of acquired pathologic conditions, such as scotomas, contraction of visual fields, alcoholism and others, which can produce temporary or permanent defects of color vision resembling those of a congenital nature but this group of acquired color blindness is not included in our sphere of study.

The congenitally color blind person manifests his defect in making mistakes in the colors in which light of long wave-length predominate. Red and green colors, as it is well known, have the longest length of waves in the spectrum, therefore the color blind usually have difficulty in distinguishing red and green colors. There are many degrees of color blindness, ranging from inability to distinguish minute differences up to total color blindness, when the individual sees all colors as shades of gray. Fortunately cases of total color blindness are very few, the majority belonging to the red and green group.

Many theories have been advanced as to the mechanism of translation the wave length into sensations of colors. Very little, however, is still known about that process and the problem seems to be quite far from being solved.

As to the color blindness phenomenon, there has been also many theories offered, the most accepted one is the one advanced by Hering in which he assumes the existence of six primary color sensations arranged in pairs. These color sensation pairs are white-black, yellow-blue and red-green and for each of these pairs a visual substance exists. Disturbances in the part of the red-green substance accounts for ordinary color blindness.

The color perception is called normal when one sees in the spectrum six colors. In color blind the color-perceiving center is less developed and he sees five, four, three or only two colors in the spectrum, calling colors alike that are seen by the normal individual to be different. Apparently, the color

blind person perceives colors in accordance with his color perception and he does not guess. It is true, he eventually learns to distinguish colors to a remarkable degree by their intensity and brightness and this is probably one of the reasons why some of the individuals tested escape detection by the usual, more simple tests.

In our school work, in addition to complete physical examination given, we test every student for color blindness. We feel that the importance of it is sufficient to warrant such a test and those found to be deficient in color perception should be so informed in order to be aware what it may mean to them regarding certain occupations later in life. We use mostly the Ishihara test which is quite satisfactory when the examination is being done as a routine procedure with a limited time. The Ishihara test is directed to detect the red-green blind and consists of a number of white cards filled with circular-colored dots. The dots are of various colors and are so arranged that some of them form a background while others are grouped to form numbers. The test depends entirely on color contrasts. It is the contrast between the dots which form the number and those which form the background that makes the number visible. Where there is no color contrast the number is invisible. Some of the numbers are visible to a person with normal color perception, others are invisible; but a person who is color blind will see numbers, where we see no numbers. He will see none where they are quite plain to us and on the other plates he will see numbers which are quite different from those which we see.

It is of utmost importance that the test plates should not be exhibited to others while one is being tested. Firstly, for the simple reason that the numbers can be learned sufficient to enable one to pass and the test will fail to discover the exact nature of color perception. Secondly, many persons who are color blind do not seem to realize or admit their defect even after being told so; they put up an argument and frequently change their statements about the numbers in accordance with the others tested in their presence, insisting that after more careful study they can see the same numbers as the normal individuals tested.

We have followed with a great deal of interest the difference with which the plates are being read by individuals whose color vision is normal and those whose color perception is defective. One with a normal color vision reads the numerals rapidly, shows no hesitancy, it is all together strange to him what it is all about. He cannot see anything wrong with the numbers; he shows absolute confidence in naming them. It is entirely different with the defective person. His attitude is entirely opposite. He looks at the plates with uncertainty, he studies them longer and more careful, he always attempts to hold the book at different angles or changes the position of his head as if he is trying to find the best position from which he might have the maximum intensity of light. Some writers refer to a peculiar look in the eyes of a color blind person. We could not prove that save for the instances when the color blind person did have a sort of helpless, forlorn look in his eyes after being told of the defect discovered. The rather wide accepted theory that congenital color blindness does not occur in females is

not borne out by facts. In our group of study we have seen girls with defective color vision but the percentage of color blindness among girls is exceedingly less than among the boys. Also the degree of color blindness in girls is not as striking as in boys. It is more of a partial nature, and only in a few instances we have seen complete red-green color blindness in girls. During the last school year, all together in 45 schools we tested 2937 boys and 3331 girls, out of which 146 boys and 43 girls were found to be color blind. This constitutes 5 percent of the boys and about 1 percent of the girls. The results indicated in percentage, are practically the same as those obtained by other observers which used more accurate instruments in their study. The incidence of color blindness is approximately the same in bright pupils as it is found among the average students and the backward ones. We have seen several boys in one family being affected and the degree of the color blindness was of the same type.

We also had several sets of twins in our group and whenever one member of a twin set was found to be color blind we could without a mistake a priori, predict that the other member of that set will display the same color perception defect on testing. One pair of twins happened to be a boy and a girl; after finding that the boy was color blind, we tested the girl. She was also color blind, the defect being of the same degree. We have not succeeded in getting information about the incidence of color blindness among their immediate relatives. That failed because most of the students tested were entirely unaware of their defect and therefore the question of color blindness has never been previously discussed at home.

Color blindness is a great handicap in many different professions. The affected ones should know that the defect really exists. The knowledge of it will make them arrange their future in such a way as to exert as little drawback on their career as possible.

As to the treatment, many attempts have been made to overcome the defect, but of no avail. There is no argument among specialists as to the part of the body responsible for this defect. Some claim it is a defect in the retina, others advance the theory that the occipital cortex is the site of the lesion; still others think that color blindness is to a certain degree a mental defect. In spite of so many conflicting theories it would be justified, however, to say, that color blindness does not indicate any defect in the optical mechanism of the eye. In the majority of our cases, the acuity of vision has proven to be normal.

Summary:

1. Red and green color blindness is a congenital defect observed mostly in males, usually affecting both eyes, the function of the eyes being otherwise normal.
2. Females are affected to a much lesser extent, the defect being rather partial and not as striking as in males.
3. With the traffic signals of red and green seen everywhere, color blindness must be looked upon as a serious condition putting the individual

so affected in the class of potentially dangerous. It is quite possible that some of the accidents may be due to the fact that the drivers are color blind and do not recognize red light at the intersections.

4. The mechanism of color blindness and the location of the defect are not clearly understood yet; many different theories have been offered but the problem is still far from being solved.

PRESENT DAY PROBLEMS IN PUBLIC SCHOOL PHYSICAL EDUCATION

RUTH EVANS

Recently I heard someone say that there are two kinds of addresses: one in which the speaker assumes the manner of the Prophet Isaiah and talks about the glorious past, or to use the vernacular, "the good old days;" the other in which the speaker becomes rather another John the Baptist and claims that "the hour of glory is at hand." Surely it must be possible to combine these two styles of addresses, to credit the years past with the contribution they have made and at the same time to make a claim for the present. Indeed, the topic, Problems in Public School Physical Education demands this two fold point of view. While leaders in physical education a generation or two ago must have faced their problems squarely and solved them well, else how would physical education have progressed as far as it has, the methods used to solve the problems of that time would scarcely serve today since the problems being met now are so different, because the whole scheme of education is so changed.

1. Integration.

That brings us to a very fascinating problem in public school physical education—that of integration. This problem of integration is one about which we have been hearing only quite recently. And why? Because only very recently has education accepted the idea as being of value. A few years ago a public school curriculum was made up of the various school subjects, arithmetic, reading, spelling, geography, etc. There was a definite amount of time daily set aside for each of these school subjects; for example, thirty minutes for arithmetic, ten minutes for spelling; definite lines were drawn between subjects. In those days physical education was a special subject; it was looked upon as a sort of antiseptic agent in education, a panacea for the ills of education. A few minutes each day were set aside for physical education and certain very limited activities (usually "setting up exercises") were conducted.

Not so today! The modern school places its emphasis not so much on formal instruction as on activity as a basis for learning. Children learn by living together, working and playing together, through solving problems, through making mistakes, through achieving successes. With this present tendency to organize subject matter around the activities of children, subjects in the curriculum are becoming fused. The basis for this activities

program is that children learn through experience, and in the modern school since children no longer sit in their chairs all day listening but are free to move about, they engage in experiences first hand.

What about physical education in this scheme of integration? How can we apply the principle of integration to the physical education activities program? In the elementary schools the first possibility is to correlate physical education with the social studies. If for example a fourth grade is studying Holland, then the physical education program should be (in part at least) made up of games and dances from Holland. If Indian lore is being used as an instruction unit basis, then Indian games and dances should be taught. One danger is imminent here—that of improvising subject matter. Because of certain national characteristics in dances and games that have been handed down from one generation of teachers of physical education to another, it has become rather usual for many of us to put these characteristics into a series of dance steps and call the result a folk dance of a given country. It seems educationally unsound to do this, when at the present time there is such a wealth of fine authentic national material available. There are of course other possibilities beyond the social studies—English, music. Two typical units are: Hansel and Gretel and Winter Sports—creative physical education.

As we progress from the elementary grades into secondary schools, direct opportunities for integration are rather more scarce. One reason for this is the necessity for departmentalization. However, the teacher of any subject who is aware of what is being carried on in other departments of the school can always find ways to apply this principle.

II. The Classroom Teacher in Physical Education.

This problem of integration brings along with it another question which has been recently receiving much attention; namely, who shall teach physical education activities in the elementary school, a special teacher or the classroom teacher? While there are many who champion the idea of the special teacher, the trend today is very definitely in the direction of using the classroom teacher. Here indeed are we following the example of our predecessors, for formerly this policy was almost universal. Then as physical education began to grow rapidly after the war, special teachers were installed in the elementary schools of many cities; now the pendulum is swinging back.

There is no question but that there are advantages and disadvantages to either plan. For example:

1. Are we being just to the classroom teacher when we expect her to be a specialist in every subject?
2. Is a classroom teacher capable of teaching the skills involved in physical education activities?
3. Physical education is apt to be slighted by classroom teachers who do not enjoy teaching it, since the school program is so crowded anyway.

On the other hand:

1. If classroom teacher is in charge of physical education, children can be given activity at the time it is most needed.

2. Classroom teacher can more easily integrate entire program.

3. Physical education will be a special subject if taught by a special teacher, a regular subject if taught by classroom teacher.

All agree, of course, that the classroom teacher requires careful supervision.

III. Meeting Needs of Pupils.

Ten years ago when a director of physical education set about writing a course of study, what procedure did he follow? Usually he wrote to as many city or state departments he knew of where outstanding work in physical education was being carried on, and requested copies of the local syllabi. When these arrived he looked them all over and did one of two things. Either he made a collection of the activities which appeared most often in this collection, or he chose those activities which looked new and usual, also a few of his favorite bits of material, bound them together, and called it the new course of study.

During this period, courses of study from other cities or states were often adversely criticized for any one of the following:

1. Perhaps one city placed a certain folk dance or game in the fifth grade, while the reader used it in the second.

2. Possibly the reader's favorite type of activity was not included.

3. Gymnastic nomenclature might differ (ex. hips firm, hands on hips, place, command march on left or right foot).

4. Gymnastic positions differ (ex. toes turned out or pointed straight ahead, wrists high or bent in, arms bend or shoulders firm.)

Today as we compile courses of study we recognize to some degree at least the principle of individual needs and differences. This principle applies not only to individual pupils, but to situations. The following points make it clear that no one course of study will fit any two situations:

1. Location and type of city (climate, size, wealth, element of population).

2. Attitude of board of education and public. (Dancing often not tolerated, play program frowned upon, religious scruples, competition).

3. Personnel in schools (abilities of teachers, their training, experience, etc.)

This idea may well apply to physical education within a system. Why teach games which require much space to children in crowded sections of a

city if one of our aims is to provide for worthy use of leisure time? Why not survey the local situation and fit the program to the needs (tennis, golf). This is being done in many places today.

IV. Health Education.

Because this topic brings to the fore such a wealth of material for discussion, even though my time will not permit me to go into it deeply. I mention it that we may all do some serious thinking about it. What crimes in education have been committed in the name of health education. The health songs that have been sung (some may still be singing them, the health stories that have been given to children, the health inspections I have seen—I could go on for a long time.) Today, I believe people in education are generally agreeing, however, that health is something to be lived, not something to be learned, and are doing some fine work in health education.

V. Babbitism in Physical Education.

My last point I am going to call Babbitism in physical education. Probably the very term Babbitism is an example itself of the worst kind of Babbitism—nevertheless I am going to define Babbitism as American gullibility. In education, and especially in physical education we surely have gone the limit along the line of accepting (only to discard later) any idea which savors of being new. Some examples of this Babbitism in physical education are:

1. Natural Program. What is the Natural Program? We have been told that the only natural physical activities are those handed down by our primitive ancestors, namely, running, leaping, climbing, jumping, etc. Surely a program made up purely of these activities would not appeal for long to the American boy or girl, and if these elements of activity are applied to any organized activities which savor of artificiality (and any of our better known games, tennis, baseball, golf, etc., certainly are artificial in some respects) are we not stepping out of the field of natural activities? Many teachers of physical education have been organizing just such natural programs. I do not wish to be misunderstood. I have unlimited faith in the play program, in the type of activity which is built on natural activities, but why accept fully a term which sooner or later must be discarded?

It seems so much wiser to do what most teachers of physical education are doing today (for I believe the formal-informal battle is over; few of us nowadays hold out for the superiority of the formal drill); apply the modern, informal methods of teaching to the best subject matter possible, and not be concerned about the name.

2. Systems of Gymnastics. Those of us who have been in physical education long enough look back to the days when the battle was being waged between the German and Swedish systems of gymnastics and laugh at the futility of it all. Yet aren't we guilty of just such futile discussion today? Looking back, let us trace: German, Swedish, American (Y. M. C. A. hygienic gymnastics), Danish (Bukh and others), Expressionistic (Bode). Why

do we attempt to import any whole system of gymnastics from a country where the needs were probably nicely met by it, and attempt to apply it in America, where our needs are quite different? Take for example, Nils Bukh's system of Danish Gymnastics—delightful, enjoyable activity, but planned for people of an agricultural country. Surely the needs of an American people are not identical with those of the Danes. I believe we are striking a sensible attitude today when we attempt to use what seems fitting of any so-called system or plan of work.

Conclusion—(Dr. Fretwell's definition of a speech).

I have by no means covered the field of problems in physical education. I have attempted to present to you a few of those which seem outstanding. If we believe in our own times, then we are getting somewhere; if we prefer to look back and attempt to emulate our forefathers, then we must do much, for one thing was true of our forebears—"they did something." Let's do something in physical education.

SCIENCE SECTION

CITY COLLEGE—Friday, October 23, 1931

Chairman—Mr. Edward G. Stapleton

Secretary—Miss Mary C. Carroll

The Science Section of the Maryland State Teachers Association met Friday, October 23, 1931, at 3.15 P. M. in the Alumni Room of the City College, Baltimore, Maryland. The meeting was opened by Mr. Edward G. Stapleton, chairman, who summarized the work of the Science Committee during the past year. He explained that the topics selected for discussion on the Science program were based upon the questions submitted to the Science Committee from teachers throughout the State.

The program presented was as follows:

1. "Fighting the Japanese Beetle"—by Hollis G. Howe. City Forester, Baltimore.
2. The Relation of Forestry to the Teaching of Science in the Public Schools—Mr. Walter J. Quick, Assistant State Forester.
3. The Coordination of English with Science—Carleton E. Douglass, Assistant Superintendent, Intermediate Grades, Baltimore.
4. Definite Suggestions for Improvement in the Teaching of Science—Miss Marian Janney, Supervisor, Baltimore.
5. Pupil Experimentation versus Teacher Demonstration in the Teaching of Chemistry and Physics—Dr. Edwin L. Frederick, Forest Park High School.
6. The Application of Scientific Information in the Teaching of Better

Living Conditions—Miss Anita Dowell, Maryland State Normal School, Towson, Maryland.

7. Development of Scientific Method through the Teaching of Science—J. Curt Walther, Maryland State Normal School, Towson, Maryland.

The election of officers followed. Miss Mary C. Carroll, Supervisor of Intermediate Grades, Baltimore, was elected Chairman of the next session in 1932, and Mr. Edward C. Stapleton, Principal, Kenwood High School, Raspeburg, Secretary.

There were about 125 persons present.

The meeting adjourned at 5.15 P. M.

Mary C. Carroll, Secretary

SUMMARY—NOTES FROM THE SCIENCE LECTURES

Fighting the Japanese Beetle—Hollis G. Howe, City Forester, Baltimore.

This report outlined the spread of the Japanese Beetle and the destruction wrought by the pest as well as the methods suggested by the United States government for the control of this pest.

The Relation of Forestry to the Teaching of Science in the Public Schools—Walter J. Quick, Jr., Assistant Forester, Baltimore.

"Teachers are aware that there are now before the people many problems which are interwoven with forestry, and that our citizens are seeking information to enable them to act wisely when these problems confront them. It is unfortunate that there is not more material presented for educational purposes which the teacher could use as a foundation for inculcating right views concerning these problems. For example, suppose the teacher lives in Frederick, a town that is having difficulty in securing an adequate water supply. The teacher of geography may tell pupils that this absence of sufficient water is due to the removal of the forests from the Catocin Mountains and destruction by repeated forest fires, and that as the forests are further destroyed the difficulty in securing water supply will increase; but the pupils have possibly not been taught anything about the influence of forests upon stream flow and so do not really understand the situation. They are told a bare external fact and that is the end of it."

The Coordination of English with Science—Carleton E. Douglass, Assistant Superintendent, Department of Education, Baltimore, Maryland.

"The expanding curriculum calls for economy of time in the school program. The necessity of taking care of many new demands upon the curriculum raises the question of economy through coordination of subjects. There is also a growing disbelief in the teaching of subjects in the degree of isolation which they have had heretofore. Doubtless, there is much to be gained by the coordination of various subjects. Of all subjects, English is the one which cannot be taught successfully in isolation. It should be true

in practice as well as in theory that every class is an English class and every teacher is an English teacher.

We get poor returns for time, money and effort expended in the teaching of constructive English. The question may well be raised as to whether this is not because constructive English has been confined too largely to the English classroom. If standards of good expression are adhered to only when pupils are under the immediate direction of the English teacher, it will be useless to hope to effect the downward pull in the greater number of hours of work which pupils are doing upon a lower plane of expression. Abilities in English expression will no more carry over from one class to another than will skill in handwriting, and we have long known that the most serious difficulty with the handwriting program has been lack of insistence upon high standards in all of the pupil's work.

In considering the coordination of science and English, we find on the one hand a subject demanding much more time than has been allotted to it, and on the other hand, a subject which constantly requires situations which are real. No doubt science will in the future hold a much more prominent place in our schools than it has held in the past. We live in a scientific age and this fact should be far more obvious in the carrying out of our elementary school program. My contention is that through coordination of English and science adequate provision can be made for the teaching of science and at the same time and ideal situation developed for the teaching of English.

Work in science calls for clear, lucid and honest expression. No unit in science is thoroughly taught until pupils can give it full expression, oral or written. Science calls for discriminating observation, which leads to accurate thinking, and clear thinking must precede clearness of expression.

Definite Suggestions for Improvement in the Teaching of Science—Miss Marian Janney, Supervisor, Baltimore, Maryland.

As a direct outgrowth of classroom science work, extra curricular activities show the extent to which general science leads to worthy use of leisure time. Boys particularly, are interested in constructing something which really works and proudly exhibiting it for the class. Some junior high school teachers encourage this type of activity by occasionally setting aside a classroom period for such pupil demonstrations. The young demonstrator must first convince the teacher that his apparatus works. The teacher has no desire to have this amateur show branded by spectators as "fake." Each exhibitor, too, must be able to explain the why and how of his demonstration to his audience.

Pupil Experimentation versus Teacher Demonstration in the Teaching of Chemistry and Physics—Dr. Edwin L. Frederick, Forest Park High School, Baltimore, Maryland.

Dr. Frederick discussed two studies. His first report concerned the study made by Kiebler and Woody, "The Individual Laboratory versus the Demonstration Method of Teaching Physics," *Journal of Educational Research*, January 1923. The other report explained Carpenter's "A study

of the Comparison of Different Methods of Laboratory Practice in Chemistry," *Journal of Chemical Education*, July 1926.

The conclusions drawn by the conductors of these two investigations are that as far as the abilities measured (chiefly memory tests) are concerned, the demonstration method is as efficient as the individual laboratory method with a resulting saving of time and equipment expense.

In concluding his lecture, Dr. Frederick explained the qualifications considered necessary for leadership in industrial work today and indicated how the individual laboratory work secures his training.

The Application of Scientific Information in the Teaching of Better Living Conditions—Miss Anita Dowell, Maryland State Normal School, Towson, Maryland.

Many times all of us doubtless have thought with Shakespeare's Portia, "If to do were as easy as to know what to do, chapels had been churches and poor men's cottages, princes' palaces." I've heard kindergarten children recite sufficient health rules for an adult to live by quite well. Although a number of elementary health texts deal with material that can readily be put into practice, one may still raise the questions as to what extent the teachings of the texts are transferred into the lives of the pupils.

There are certain guides that we may set up that can serve in our selection of scientific information if it is to make a desirable change in conduct:

- a. It must be of some real value to the pupil from his own point of view.
- b. It must be within the pupil's understanding.
- c. It must compete with general community practices and standards.

Development of Scientific Method Through the Teaching of Science—J. Curt Walther, Maryland State Normal School, Towson, Maryland.

Superstition has much in common with science. Indeed, science may be regarded as an outgrowth and further development of superstition. It is well known to all of you that what is called science today had its roots in such stages as astrology, alchemy, physiognomy and phrenology and others, which were based upon semi-magical procedures and false assumptions. In both cases there is an attempt to control the forces of nature or super-nature to the will of man. In both cases there is a search for a cause through which the future may be determined. However, beyond this point lies the parting of the ways.

Note: A copy of each lecture has been placed in the file of the Secretary, Mr. Edward G. Stapleton.

THE COORDINATION OF ENGLISH WITH SCIENCE

Carleton E. Douglass, Assistant Superintendent, Department of Education,
Baltimore, Maryland

The expanding curriculum calls for economy of time in the school pro-

gram. The necessity of taking care of many new demands upon the curriculum raises the question of economy through coordination of subjects. There is also a growing disbelief in the teaching of subjects in the degree of isolation which they have had heretofore. Doubtless, there is much to be gained by the coordination of various subjects. Of all subjects, English is the one which cannot be taught successfully in isolation. It should be true in practice as well as in theory that every class is an English class and every teacher is an English teacher.

We get poor returns for time, money and effort expended in the teaching of constructive English. The question may well be raised as to whether this is not because constructive English has been confined too largely to the English classroom. If standards of good expression are adhered to only when pupils are under the immediate direction of the English teacher, it will be useless to hope to effect the downward pull in the greater number of hours of work which pupils are doing upon a lower plane of expression. Abilities in English expression will no more carry over from one class period to another than will skill in handwriting, and we have long known that the most serious difficulty with the handwriting program has been the lack of insistence upon high standards in all of the pupil's work.

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Work in science calls for clear, lucid and honest expression. No unit in science is thoroughly taught until pupils can give it full expression, oral or written. Science calls for discriminating observation, which leads to accurate thinking, and clear thinking must precede clearness of expression.

With the valuable and interesting content of science at hand, it is difficult to see why teachers need drag in composition subjects which can have little or no relation to the occupation of children, which is their pursuit of the school subjects. "How I Spent My Last Vacation" certainly is not as profitable a stimulus of interest as is the report of a pupil now due upon "The Purification of Our Water Supply." A pupil's school life is made up of many problems, interesting and immediate, problems which spring from their daily tasks. In these problems they will find the best of social situations and English is a social medium and can be taught only in social situations.

Not all types of English expression can be taught to best advantage in the science classroom or in any other than the English classroom. However, I maintain that the most desirable English abilities can be developed in science and in other subject matter fields. Science may not offer the best opportunity for "fine writing," but it does offer opportunity for developing

practically all the common language virtues which we need in daily life. The coordination of science and English can be developed extensively to their mutual benefit.

THE RELATION OF FORESTRY TO THE TEACHING OF SCIENCE IN THE PUBLIC SCHOOLS

By Walter J. Quick, Jr., Assistant Forester, Maryland Dept. of Forestry

The public is gradually becoming aware of the great importance of the forestry movement to the welfare of the nation. A better understanding of the functions of forests in serving mankind is a part of the public consciousness.

Not many years ago few people recognized the importance of forests in regulating stream flow. This failure to understand one of the most important functions of the forest was undoubtedly due to an inability to see easily the water thus conserved. In changing this viewpoint, educational methods have brought about an understanding of how forests act as great reservoirs and aid in preventing disastrous floods as well as in maintaining the flow of stream at a rate that is nearly uniform all the year around.

I think that we all recognize the importance of impressing the proper understanding of present day existence and daily experience at an age when the individual is establishing his habits of thought. Persons of mature age frequently have some difficulty in adopting a new conception of our every day existence. The public has for generations had a general appreciation of attractive and beneficial song birds, but the tremendous public value of trees and forests has been adopted more slowly. This is because of the age-old feeling that forests are inexhaustible and a hindrance to advancement. To erase thoroughly this attitude from the public mind is an undertaking which must be directed towards the education of rising generations. Only to a limited extent can we succeed in changing the attitude of mature minds, but a daily application of principles of forest conservation in the experiences and training of younger minds can completely change the public attitude.

Without doubt, an understanding of the importance of forests to mankind is the first step in bringing about a desire for better forestry practice. In showing this importance, the production of firewood should be considered. Instructors should appreciate that fuelwood is largely a by-product of the forest produced thru decay or faulty trees in the farmer's woodlot, the waste product of a lumber region, or from land that is cleared for cultivation. In considering the 100 million cords used annually in the United States, instructors should endeavor to create the proper appreciation of this forest product. Too frequently it is not presented in the nature of a by-product.

The real purpose of the forest in producing saleable timber suitable for manufacture into lumber should be given the importance it deserves, and the variety of ways in which lumber is used in building houses, barns, sheds, outbuildings and fences should be stressed. Too seldom a child has any association within his mind between the wood in his home and the grove of trees at the edge of town.

His appreciation of wooden products should not stop with buildings. He should associate forests with supplies of all kinds—chairs, tables, beds, musical instruments, wagons, carriages, buggies, parts of automobiles, plows, harrows, harvesters, thrashing machines and other implements.

Car building is another great use of lumber. Freight cars, passenger cars and trolley cars are examples. Other important uses for timber are railroad cross-ties, poles for telegraph and telephone lines, and props in mines. More trees are used in the manufacture of paper than for any other purpose. Then, of course, there are various small articles used in the home, such as spools, toys, picture frames, matches, pencils, clothespins, toothpicks, etc. These are little things, but so many of them are used that they consume a great deal of wood. We should not omit the production of tannic acid for tanning leather, turpentine and rosin, maple sugar and many extracts in making medicines.

The effort made by the educator should be to indicate to the young mind the important benefits derived from the forests. I cannot stress too strongly the importance of this primary conception before the necessary steps in forest conservation are presented. Appreciation of benefits received is the keynote to a genuine interest in, and desire to promote, conservation.

In urging this method of presenting the benefits of forestry, my intention is not to advocate the addition of another study to the public school curriculum. In most cases it is already too cumbersome. However, it is important that with the changes in our economic, political and social conditions, and the progress made in sciences, we adapt our present courses to the new conditions. Teachers often feel that their lot is a hard one because they are required to buy new books and attend lectures and summer schools in order that they may keep up with the continual changes. Though the teacher's salary is often incommensurate with the things required, it is very evident that teachers must keep alive to the new conditions to be of real service.

The progress of forestry and the forest movement in America must be counted among these changes. Good teachers must show an increasing interest in forestry, and we are now at a point where greater attention must be given to it in public school teaching. Modern textbooks are devoting more space to forestry and new editions cannot fail to present the latest developments. Geographies, botanies, histories and science books are devoting increased space to forestry. On the other hand, the energetic teacher will not wait for a new text, but will secure the necessary information and present it to the classes.

Forestry should not be taught in the public schools as a separate study, nor should it take up technical details of the actual practice of forestry except to a limited extent in agricultural high schools. Where, then, does it belong? The answer to this should be sought in the ultimate object of all public school instruction. It is sometimes forgotten that the business of teaching is not the mere presentation of facts, but to train the mind and body in such a manner that the child can cope successfully with the problems, private and public, which later confront him in his daily life as a citizen.

Teachers cannot accomplish this and unless they correlate the work of the school with the things going on in the world outside.

The child should be made to take an active interest in the important problems before Americans as a people and be set to thinking about these problems in connection with his school work. If a teacher of history does not interest his pupils in the coming elections and cause them to apply their past instruction to the questions which should decide the vote, he fails to correlate the life of the school with that of the world. Likewise, if a teacher of geography, in discussing river and harbor improvements, does not create an active interest in any local improvements that may be under way, an opportunity is missed. Thus forestry should be taught as an integral part of related subjects. Undoubtedly, a large share of the subject matter will fall within the science classification, but forestry positively cannot be excluded from other courses of study without jeopardizing the value of the work. The work of the school should treat forestry as one of the important economic and public questions in the life of the world.

Teachers are aware that there are now before the people many problems which are interwoven with forestry, and that our citizens are seeking information to enable them to act wisely when these problems confront them. It is unfortunate that there is not more presented for education purposes which the teacher could use as a foundation for inculcating right views concerning these problems. For example, suppose the teacher lives in Frederick—a town that is having difficulty in securing an adequate water supply. The teacher of geography may tell pupils that this absence of sufficient water is due to the removal of the forests from the Catocin Mountains and destruction by repeated forest fires, and that as the forests are further destroyed the difficulty in securing water supply will increase; but the pupils have possibly not been taught anything about the influence of forests upon stream flow and so do not really understand the situation. They are told a bare external facts and that is the end of it.

But suppose they had been taught in their science work to observe what becomes of rain water and snow water, how exposed soil is washed and gullied, and how quickly the downpour rushes from the surface to more distant areas; how various kinds of vegetation modify these effects; how gently the rain falls and how slowly the snow melts in the woods, and how absorptive is the forest soil—in other words, the everyday facts of erosion and water conservation as they may be seen in every child's dooryard. Can it be doubted that the lesson of diminished water supply as related to forest destruction would come home in terms of living experience?

So, I say, in formulating our forestry lessons in science, the teacher should foresee the nature of various problems that will come up in other courses which have a direct bearing on forestry. In the lower grades, nature study will perform the same basic training in preparing for more advanced problems experienced in arithmetic and general geography. In the more advanced grades and high schools, science will assume the basic training in forestry fundamentals which lay the foundation for understanding features to be studied in United States history, civics, physical geography,

commercial geography, geology, botany, agriculture, wood working and many other courses of study now given in modern public schools.

In closing, I wish to emphasize the genuine opportunity which exists for every school teacher in presenting examples from the forest in the modern project method of instruction. The forest offers opportunities that are almost unparalleled. The forest and its inhabitants naturally appeal to a child of the investigative age. The forest is so widely distributed that it is within reach of nearly every school. Even in Baltimore City, attractive forested parks are within walking distance of every school. The forest is one of the easiest objects in which to create a sustained interest and it offers an endless field of simple material. How much more profitable to select projects from the forest as a great national problem of major importance, rather than from trivial sources such as a study of milkweed or nasturtium leaves. Man's experiences of the past have been intimately associated with a necessity of destroying the forest. He now enters an age of man-made forests which constitutes one of the most colorful pages in man's development. Educational methods must meet the need for training in forestry fundamentals.

SOME FACTORS MAKING FOR PUPIL PROGRESS IN GENERAL SCIENCE

The well known saying that the pendulum always swings backward certainly seems to be true of this youngest of present secondary school sciences—General Science. The point of view of the first General Science courses was the same as that of Natural Philosophy, first advocated by the French Encyclopedists of the 18th century. One of the finest teachers I ever knew once jokingly said to me, "The more I teach, the less I teach." This illustrates today's trend in General Science away from that Encyclopedic science to a synthesis of a few typical examples of scientific problems. One scientist cleverly remarked, "General Science has long been suffering from the malady of total recall." To teach a few things intensively rather than many things poorly should now be our aim.

The teacher's part in producing learning lies in successfully setting the stage so that learning is accomplished most effectually. The learning process is closely tied up with teacher preparation, materials of instruction and some extra-curricular activities which have recently come into prominent place in teaching many subjects. These are the three topics I shall consider.

Since more and more real students are seeing in teaching a big opportunity for life work, the number of the better prepared applicants has increased; consequently, school systems are demanding better pre-training. This tendency has resulted in some of the colleges and universities readjusting their curricular to turn out better qualified teachers. We find a definite planning for sufficient direct as well as allied subject matter courses with guidance in their selection; for basic courses in education; and for such cooperation between city systems and those higher institutions of learning to make practice or apprentice teaching possible. Powers reports a special

curriculum outlined by the University of Minnesota for training teachers of Natural Science which shows the trend I have mentioned. This curriculum requires: 1. the completion of a major in one natural science, chemistry, physics or biology, consisting of 30 quarter hours; 2. the completion of a minor in some other natural science, that is, 15 quarter hours; 3. completion of one course in each of the sciences not selected as a major or minor; and at least 10 hours of chemistry. By this plan some of all the major fields of science have been required. These requirements were found necessary because of the great gap between training offered by would-be secondary school science teachers and that demanded by the positions open to them. Training is often so highly specialized and confined to such a limited field of science that it is in no sense adequate for either general science teachers or for teachers of special sciences in senior high school. Educators, both academic and professional agree that in addition to being well informed in science subject matters, professional training is also necessary.

In speaking of science training Dr. Millikin stresses the importance of "learning by doing," referring especially to training of science students in laboratories. Teaching technique, too, is acquired by "learning by doing;" hence, the justification for practice teaching. The question as Findley expresses it is "not one of subject matter or professional training but one of subject matter with professional training." Our Maryland colleges are aware of this great need and in cooperation with our school authorities are providing for student teaching through participation under guidance.

Those of us who have been giving for many years through the medium of teaching cannot always be self-starters and travel in high gear. Frequently, we need the stimulus of working with our equals or with those who are in even closer touch with the whole field of education. Our educational balance and perspective are kept from being warped by broader contacts through readings both professional and academic; through extension courses; through cooperative work with fellow science teachers on the course of study or in considering better teaching techniques. Through these means experienced science teachers are constantly extending the frontiers of their knowledge and broadening their professional outlook.

The very nature of science training demands careful observation on which to base conclusions and so instructional materials play an important part in the teaching process. In considering equipment the teacher must keep in mind that equipment divorced from method and course of study is futile. Certainly what to teach, when to teach it and how to teach should enter into the selection and purchase of all instructional materials. Equipment need not be narrowed down to only such articles as test tubes, bunsen burners, thermometers, but in a real sense it includes all materials such as text-books, reference books, pupil guide sheets for supervised study, objective tests. To secure these varied materials becomes a problem of administration as well as of instruction.

Requisition sheets with all articles classified and selected for an accepted standard are a great help in ordering apparatus and science supplies. When once instructional materials are so classified the making of an individual

school requisition is a comparatively easy task. When such requisitions are used throughout a school system and are accessible to all science teachers, they tend to equalize the equipment. Nothing so facilitates good teaching as adequate equipment. With good equipment, though, goes the responsibility for its care. This necessitates careful storage and systematic classification, so that materials may be accessible both to teachers and pupils.

Many junior high science rooms here in Baltimore have amassed good home-made apparatus in addition to purchased equipment. The use of this for class demonstrations or for exhibition purposes acts as a powerful drive impelling pupils to further creative work. Occasionally, students help in diagram or chart making. Charts drawn on cheap light window shades have the advantage of being easily stored when not in use; they are frequently better than those found in text books or those sold by scientific supply houses. The teacher is more likely to use simple outlines and only the necessary details.

Demonstrations staged in a science room are of great importance. A fine teacher with whom I once worked, never gave the simplest demonstration without first checking carefully all apparatus for its working perfection. Her layout of materials on the demonstration table was also so carefully planned that the demonstration would proceed without a hitch. "Never give a demonstration for which you feel you must apologize," was her motto. She explained to me, an apprentice teacher, that nothing so reduces the respect of pupils as repeated bungling or failure.

After minimum equipment has been secured, if the school is a large one, a movie lantern will be used sufficiently to pay for itself. A film is an excellent device for motivating a unit or serving as a preview; it may furnish an equally good summary at the close of the unit.

Each general science unit is conveniently divided into smaller teaching units, presented to the pupils by means of guide sheets. "Learn by doing" is carried out by pupil activities given on such guide sheets. In the similarly worked out teacher-conference sheets, a skeleton plan for the teacher's presentation of the unit is given. Early in a general science course, pupils should be taught some desirable method of recording data of experiments. Each pupil must be made to see that science is based upon observable and accurate data; that memory at best is tricky and not to be relied upon for details, hence the need for concise notes made at the time of the demonstration. A note-book should be a permanent record of the student's work so that he can refer to it for information or use it for review purposes. The guide sheets for the pupil should help him in selection of material for his note-book. Page references to several texts should be given, for viewpoints of several authors aid in clearer understanding of the principle to be mastered. Since one of the habits we aim to form is ability to use reference books, time spent using a number of text-books under supervision of the teacher is not wasted. One science teacher made an arrangement with the school librarian for a floating library of supplementary books and magazines placed temporarily in the class room. She successfully worked this out without feeling the care of the books borrowed from the library too great a burden.

One window-sill was called "the library"; as pupils completed required assignments they could use extra time at "the library." This freedom did not seem to result in classroom confusion nor did it cause pupils to slight their regular work. Progress of pupils was checked by the achievement test at the end of the unit.

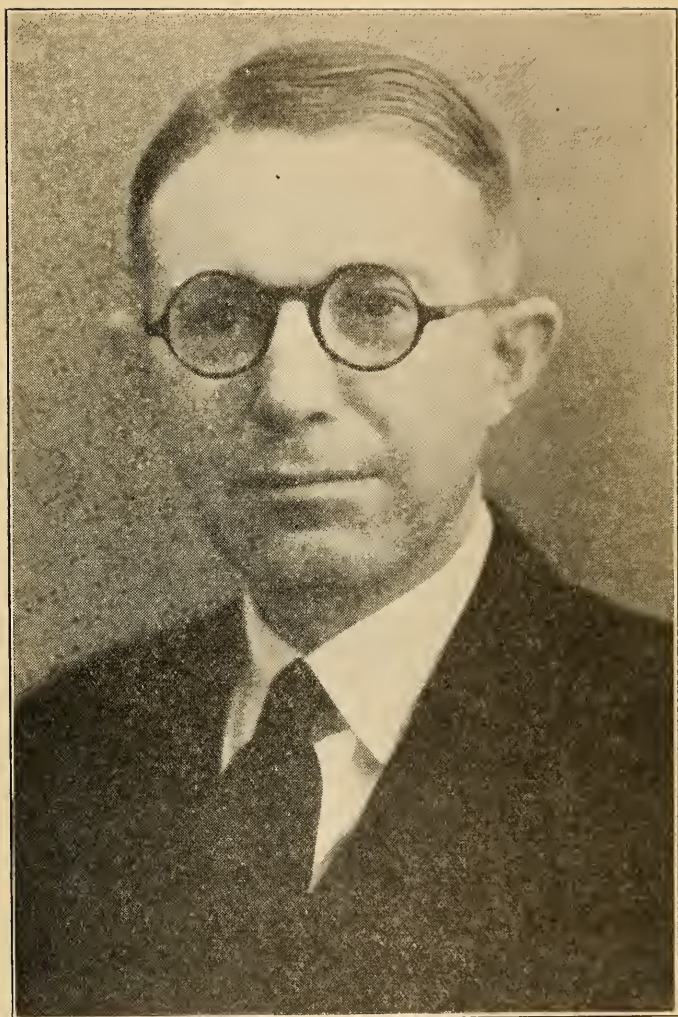
The real reason for teaching is to produce growth in pupils. Such growth is measurable, if a pre-test is given before teaching the unit and another form of this test administered as an achievement test after the learning process has taken place. A practice test with key for self-checking is desirable so that pupils may judge their fitness to take the achievement test. Every achievement test should contain a central core which is the "minimum essentials" of the course of study, but in addition there may be extra questions scaled to the varying abilities of the pupils. All who can do the "minimum essentials" are entitled to a passing grade. This means mastery at the child's level of the "minimum essentials" with the urge to do more as represented by the extra questions.

Since we rarely try to produce a single outcome through the learning process, our outcomes for science might be stated as: to guide pupils to think, to know, to feel and to do. Doing in the laboratory procedure should result in thought which should influence actions.

As a direct outgrowth of classroom science work, extra curricular activities show the extent to which general science leads to worthy use of leisure time. Boys particularly, are interested in constructing something which really works and proudly exhibiting it for the class. Some junior high school teachers encourage this type of activity by occasionally setting aside a classroom period for such pupil demonstrations. The young demonstrator must first convince the teacher that his apparatus works. The teacher has no desire to have this amateur show branded by spectators as "fake." Each exhibitor, too, must be able to explain the why and how of his demonstration to his audience. During an evening exhibition at one large junior high school pupils were definitely assigned to perform some simple experiment or display some interesting apparatus to visitors. I did a mean stunt by asking one boy a question he could not answer; he was equal to me, though, and replied that he did not know but he knew where to find the answer.

If a report period is definitely scheduled, with sufficient source material available for the pupils and enough time allowed gathering and organizing this material, what the pupils will bring in is amazing. In the report period the wise teacher checks up her pupils, insisting upon simple direct English in all oral reports and a brief summary of the report by some pupil who is a listener. Pupils are interested and enthusiastic; the teacher has opportunity to clear up misunderstandings, combat prejudices and put real science in the place of unreasoned tradition.

Morris Meister in reporting his doctor's thesis says that "a scientist at work is in reality a scientist at play; . . . that is what modern educators mean when they speak of the identity of play and work." One of the best media for science play is the science club. Here activities are stimulated, guided, controlled and developed. Much of the home-made apparatus so



JAMES M. BENNETT, President-Elect

valuable in classroom work is the result of an active general science club. Other types of instructional materials, too, are suggested here and later may be found in the school science exhibition. The mad scramble under congested conditions to prepare for such a school exhibition often makes us doubt its returns. It is not difficult for a visitor looking on to see that pupils are proud of their achievements; that those pupil visitors not yet in the science class are surely getting a mind set toward science; that science is being sold to the parents and to the community.

One famous physicist, Dr. Millikin, says, "We have scarcely begun to touch the possibilities of science instruction in the secondary school as a preparation for rational scientific living and thinking, yet this is the supreme need of America today, where frauds, cults, fads and isms exist as evidences of unscientific thinking and living."

Downing says, "If science teaching can habituate pupils to careful scientific thinking and point the way to carrying the habit over to the citizen, it will do a great service to the individual and to the nation." Herein is the big challenge which calls for broad vision coupled with better teaching methods.

PUPIL EXPERIMENTATION VERSUS TEACHER DEMONSTRATION IN THE TEACHING OF CHEMISTRY AND PHYSICS

Dr. Edwin L. Frederick, Forest Park High School, Baltimore, Md.

Various studies have been made on the individual laboratory method as compared with the demonstration method in the teaching of Physics and Chemistry. I should like to quote from two of these studies.

The first is by E. W. Kiebler and Clifford Woody, entitled "The Individual Laboratory versus the Demonstration Method of Teaching Physics," which appeared in the *Journal of Educational Research*, January, 1923, Vol. VII, pp. 50-58.

The problem was to evaluate the merits of the individual laboratory method and the demonstration method of teaching Physics.

The investigation was conducted with two groups regularly taking Physics. The groups were equaled on the basis of scores in the Army Alpha Test, each group containing good, average and poor students, but only those whose attendance was perfect and whose attitude was conducive to good work were included in the investigation.

Fourteen experiments on heat were divided into two series of seven each; with the first series the individual laboratory method was used with group X and the demonstration method with group Y; with the second series, the methods with the respective groups were reversed.

In the individual laboratory method each pupil or group of pupils performed the experiment in the demonstration method. The instructor assisted by one or two pupils, demonstrated the experiment, the import of which the pupils got through observation and discussion. The same preliminary assignments in the same textbook were made in each, and the same type of

quizzes given to test the effectiveness of reading and understanding of new terms.

From this point on, the methods differed: with the individual method, each pupil began to study the experiment as given in the manual. He prepared his temporary sheet, stated the object of his experiment, listed the apparatus, and made a suitable table for recording the data. A quiz was then given on methods of performance, special emphasis was placed upon necessary precautions and possible sources of error. The pupils then performed the experiment individually, or in pairs, recorded the data, made calculations and wrote up the temporary discussions. Later, after these had been corrected and general errors had been discussed in class, the pupil wrote up the experiment in permanent form.

With the demonstration method, after a short quiz on the assigned reading and new terms, the instructor announced the experiment for the day, asked the pupils to write the purpose on a temporary sheet, questioned the pupils on necessary apparatus which they listed. He then developed the necessary method, the necessary precautions and possible errors through questions. Then, with the help of one or two students, performed the experiment before the class. The pupils copied the data written on the board, made calculations from them and completed the temporary discussion. Later, as with the laboratory group, after the sheets had been corrected and the errors discussed, each pupil wrote up a permanent record.

The results were measured by three types of test: (1) temporary or immediate facts of the experiment; (2) tests of performance or delayed knowledge; (3) tests of knowledge of how to apply principles and technique learned in attacking a new problem.

In the first informal tests were given one to two weeks following each experiment, in the second a general test was given two weeks after the seventh and fourteenth experiments.

In two experiments as a variation of the method of testing for immediate and delayed knowledge, the test for immediate knowledge of the facts of the experiment was given upon completion of the "temporary discussion" and given two weeks after the experiment had been permanently written up.

In the third, the pupil was confronted with new problems: he was furnished with a list of needed apparatus and was given an informal test in which he was asked to make simple drawings, showing how the apparatus would be used and to fill out broken sentences describing methods of possible procedure. Each pupil in the individual method then performed the experiment and in the other group the instructor performed the experiment. Two weeks later both groups were rigorously tested.

While all the tests were informal, they were as nearly objective as possible and embodied many principles utilized in making standardized tests, completion, matching, true-false and best answer.

Findings

(1) With respect to immediate knowledge, in the first seven experiments the demonstration method showed superior results in five and inferior results

in two experiments; in the second seven experiments, it showed superior results in three, inferior in three and a tie in one.

(2) Those using the demonstration method during the first seven experiments were more successful with the laboratory method in the second seven; this fact showed that at worst the demonstration method was no handicap to these pupils.

(3) The individual laboratory method proved superior in those experiments difficult to demonstrate, but the demonstration method proved superior in those difficult for the pupils to perform.

(4) The advantages in permanent knowledge were in favor of the individual method but were "so slight that it is of little consequence."

(5) A comparison of the mean scores in both methods on the tests given immediately after the temporary sheet had been completed and again two weeks after the experiment had been written up, showed higher scores for the demonstration method in three out of four possible comparisons, possibly because the facts had been more vividly portrayed in demonstration.

(6) The initial superiority of the demonstration method was shown by the fact that the group using the individual method made much more gain in the second test than the group using the demonstration method.

(7) The value of permanently writing up was clearly shown by the gains by both groups on the second test.

(8) The demonstration group, when confronted with a new problem with only the apparatus given, were superior on the method of procedure before the experiment was performed and in the test after the experiment. Therefore, the demonstration group "has as much ability in attacking new problems as the group trained with the individual laboratory method."

Summary as quoted from article.

On the basis of the results obtained, the following observations seem justified:

(1) The results secured through the use of the demonstration method were as good, if not better, in all three types of test given, the test for immediate knowledge, for permanent knowledge and for knowledge of how principles and technique in solving a new problem. While the advantage in favor of the demonstration method is small, it is very significant.

(2) The individual method tended to be superior in these experiments that are especially difficult to perform or in which great care is needed to be taken to see the exact procedure. Such facts suggest that the most effective method depends upon the nature of the experiments themselves and suggest the need for scientifically classifying them.

(3) When the demonstration method gives equal or superior results, it is to be preferred to the individual laboratory method because it saves about

half the time usually devoted to performing the experiments and permits the instructor to use the time thus saved in relating the facts and principles to allied phenomena. Furthermore, the enthusiasm of the class working together is most valuable.

The second article, "A Study of the Comparison of Different Methods of Laboratory Practice on the Basis of Results Obtained in Tests of Certain Classes in High Schools," is by W. W. Carpenter, Peabody College, Nashville, Tenn., and occurred in the *Journal of Chemical Education*, Vol. 3, H7, July, 1926, page 796.

The purpose of the experiment was to compare different methods of laboratory practice on the basis of results obtained on tests of numerous classes of high school chemistry taught by different teachers in different classrooms, and to use some method of evaluating difference, if found, in order to determine whether these differences are real significant differences.

Thirty-four classes from twenty-three schools in fourteen different states were tested.

The method of conducting the experiment was a modification of Dr. McCall's rotation method of experimentation.

The method was selected because such irrelevant factors as teaching skill of teacher and differences in abilities of groups are eliminated.

Each class could be compared with itself on the different methods and finally by combining all the classes, it was possible to compare the results of the entire group in its success on the different methods.

The following methods of performing the experiments were used:

(1) Demonstration Method.

(2) Individual Method.

(3) Group-of-two Method.

(4) Control method, student taking the examination before he performs the experiment.

Tests constructed by the author were made on the basis of ten introductory experiments as found in one of the most popular chemistry laboratory manuals. (Fuller-Brownlee). The tests are objective as to grading and vary as to numbers of questions on each experiment, as to difficulty and as to type of question. Most of the questions are of the multiple choice type. It was the aim of the author so to construct the questions that they would test the ability to think in the realm of chemistry as well as to recall specific information.

Classes were assigned by chance to four groups, A, B, C and D. Each group represented a different scheme of routing by methods. Group A performed the first experiment by method 1, group B by method 2, group C by method 3, group D by method 4. Group A did the second experiment by method 2, B by method 3, C by method 4, D by method 1, etc.

Conclusions drawn by author:

The results of this experiment point to the conclusion that the majority of students in high school laboratory chemistry classes taught by the demonstration method succeed as well as when they perform the experiment indi-

vidually, if success is measured by abilities as are measured by these tests.

The results of this experiment also indicates that the majority of students in high school laboratory classes performing experiments in groups of two do not succeed as well as when they perform experiments working alone, when success is measured by abilities as measured by these tests. The practical difference between the results obtained from individual methods and the group-of-two method while significant, may not justify the additional expense of material and equipment required for individual work.

Quoting further from the same article:

"There are probably other abilities not measured by these tests or any test yet constructed that will rank the individual method higher than the demonstration method. We have as yet no adequate test for scientific attitude, appreciation, manipulative skill in handling apparatus, or scientific method of procedure. Conclusions of a very general nature cannot be made about the comparative worth of these methods of instruction studied here unless we limit our statements to the certain abilities measured."

"There are two school groups particularly interested in a study of the type of classroom teacher and the administrator. It is hoped that administrators as well as classroom teachers of science will realize that while the studies in this field so far have shown the value of demonstration as a method of instruction for certain abilities, however, so far as we know, we must consider the usual laboratory method as one of our most efficient means of instruction. There are today too few laboratories in our high schools, not too many."

It would seem, as brought out in the latter part of this article, that in these experiments we haven't measured all things. The tests so far have not covered a very large number of students or a large number of experiments. They have been largely memory tests. Science teaching has more to offer than just memory work, has something which no other subject has to offer, the development of the scientific attitude, the development of the ability to see a problem, size it up and work it through to a successful finish, the development of manipulative skill and scientific procedure.

You will all agree that this is a scientific age and more than ever modern industry is developed and controlled by scientific methods. Allow me to read to you the characteristics found on a rating sheet as given me by Dr. Gordon, Prof. of Chemical Education, J. H. U., for candidates for the industrial fellowships which are being awarded at the Johns Hopkins University. These characteristics were suggested by seventy-eight of the foremost industrial men in the country and further checked and approved by the heads of the Science Departments of 100 colleges throughout the United States. Ask yourself whether these characteristics would be better developed by laboratory work or by demonstration.

Book Ability—Capacity to learn from books.

Conduct—Cooperative attitude towards others; consideration for others.

Creative Ability—(This characteristic is rated highest of all). Intuitive imagination, originality, resourcefulness, ability to use and solve problems.

Enthusiasm—Energy, interest put into work, enterprise.

Executive Ability—Efficient in organization of his work, apportionment of his time.

Experimental Skill—Technic as shown in laboratory work.

Faculty of Observation—Power to observe and record results accurately.

Intellectual Honesty—Does he observe what really takes place or is he influenced by preconceived ideas?

Perseverance—Application, persistency.

If industry rates these characteristics so highly, then we should do all in our power to develop them. Heretofore we have always helped the backward child. There is a movement on foot now to help the accelerated pupil and individual laboratory work takes care of the individual differences in the different pupils.

Allow me to quote once more from Mr. Carpenter's article:

"Will the administrator in his search for economics and in the light of these studies suggest that laboratories be omitted from high schools and that individual laboratory work be eliminated and all science in the high school be offered by the demonstration method? Such a move would indeed be unfortunate."

THE APPLICATION OF SCIENTIFIC INFORMATION IN THE TEACHING OF BETTER LIVING CONDITIONS

Miss Anita S. Dowell, Md. State Normal School, Towson, Md.

From the point of view of healthy living this topic might be stated, "The Application of Scientific Information in the Teaching of Healthy Living." Then there are two questions which we would ask ourselves:

1. What is the use of scientific information in the teaching of healthy living? and

2. What are our guides in selecting this information?

1. What is the use of scientific information in the teaching of healthy living?

At the beginning of the health education era, teachers of health took different points of view as to the value of information for elementary pupils. There were those who reduced information to hygienic rules of living only. This was a reaction from the old teaching of anatomy and physiology, when the whole content was informational. During the past few years the pendulum has swung in the direction of what aims to be a reasonable amount of scientific information in health teaching. Very happily one of the steps in this respect is that scientific information is supplanting the make-believe, the fancy and the distortion that have for so long a time characterized health teaching in the elementary school.

Information in health teaching is valuable at least for two reasons:

a. Knowledge is primarily a tool. A person uses it to achieve certain ends and to reach certain goals. For the scientific thinker information is the raw material out of which he fashions his ideas and concepts. Some residue of knowledge is also of use in meeting new situations. Habits function when the stage is set. Remove or rearrange the furniture and the habit is interfered with; the use of knowledge can serve best in meeting an experience with new elements.

b. Information has a place in forming public opinion. We find many illustrations when the advertisement of certain information has set up public opinion. Since milk has been shown to be a highly desirable food, family milk bills have increased, adults as well as children drink milk, and schools make it possible for children to have milk during the school day.

Information as a tool in seeking some goal and in meeting new situations and information as a factor in forming public opinion seem worthy reasons for the use of scientific information in teaching health.

2. What are our guides in selecting information?

First of all, we need to remind ourselves that information does not necessarily influence conduct. In teaching health we aim to change conduct—to bring about more desirable conduct. Information cannot be depended upon to do this.

Many times all of us doubtless have thought with Shakespeare's Portia, "If to do were as easy as to know what to do, chapels had been churches and poor men's cottages, princes' palaces." I've heard kindergarten children recite sufficient health rules for an adult to live by quite well. Although a number of elementary health texts deal with material that can readily be put into practice, one may still raise the questions as to what extent the teachings of the texts are transferred into the lives of pupils.

There are certain guides that we may set up that can serve in our selection of scientific information if it is to make a desirable change in conduct:

- a. It must be of some real value to the pupil from his own point of view.
- b. It must be within the pupil's understanding.
- c. It must compete with general community practices and standards.

Knowledge is primarily a tool. This tool is used most effectively in modifying conduct when the individual seeks it in order that he may do something or attain a certain end. The boy follows directions for daily living that his athletic coach sets up because such living helps him make the team, or because such living he feels has an influence on his success. The person truly interested in reducing his weight, consults his physician, lives by the regulations which are given in pamphlets on the subject or takes the suggestions of his friends.

In the last twenty years the consumption of lettuce in two states has increased 250% and 2500% in the larger cities, all in response to the fact that certain vegetables are desirable sources of vitamins. In our own ex-

periences we can find many instances when we have forced our tired feet and our equally tired brains for long hours in search of information that we felt was an aid toward a definite goal. When information helps the individual to do something that he wants to do, it functions.

If information is to influence conduct it must not only be of value to the individual from his own point of view, but it must also be within his understanding. It seems a truism to say that pupils must understand the facts that we expect them to learn. However, those teachers fail in this respect who teach a third grade selection of proper food by using the terms proteins and carbohydrates, or who teach posture by giving a verbal description only, or who base the reason for preventing colds on keeping the feet dry.

Information within the pupils' understanding:

- a. Should be free from technical terms, or if such terms must be used, they should be simply defined so that their meaning is quite clear.
- b. If the information is in the form of a procedure, it should be illustrated or demonstrated and not stated verbally only.
- c. The information needs to be reasonable. It is difficult for an elementary child to make the connection between wet feet and colds. When knowledge is reasonable, it shows a child how he can get the things he wants.

Besides the fact that scientific information to influence conduct must, first, be of value to the individual, and second it must be within the pupils' understanding. It must also compete with community practices and standards. Children adopt and respect the hygienic standards of their parents. Parents may be easily influenced by the standards of their neighbors. In a community we often find health customs and health moves. Mrs. Brown doses herself with aspirin because Mrs. Green finds it so effective. Schools need to persuade pupils that scientific information is the only safe answer to their inquiries.

In the "Application of Scientific Information in the Teaching of Better Living Conditions":

1. Scientific information is desirable since
 - a. It is a tool that can be used toward the attainment of some aim and in meeting new situations.
 - b. It builds up public opinion.
2. Our guides in the selection of information are:
 - a. The information must be of real value to the individual.
 - b. It must be within the pupil's understanding.
 - c. It must compete with community standards and practices.

TEACHING SCIENCE THROUGH A DEVELOPMENT OF SCIENTIFIC METHOD

E. Curt Walther, Md. State Normal School, Towson, Md.
Popular Superstitions

"To win every game engaged in, tie the heart of a bat with a red silken

string to the right arm and you will win every game you play."—Hohman's "Long Lost Friend."

"Tie a red string about a baby's wrists to keep off colic." (Southern Mountaineers, India).

"An iron ring will cure fits."

"Shears placed in the cradle will prevent the baby from being stolen."

"If a horse neighed, someone will die in the direction the horse's head is pointed."

"Wearing a nutmeg cures boils."

"A horse-chestnut (buckeye) carried in the pocket cures rheumatism."

"Eating the black powder made from the remains of charred toads will prevent plague 'small-pox'—Winthrop's recipe.

"Money placed in the hand of new born infant will insure wealth."

"A bride hit with an old shoe shows the husband to be the boss."

"A bride hit with rice will have many healthy children."

"See a pin and pick it up—all the day you'll have good luck."

"Potatoes planted during the new moon will yield a better crop."

"Handling toads produces warts."

"Winters were longer and colder when we were children."

"Beavers know whether an approaching winter will be mild or severe, long or short."

"Red color enrages bulls."

"Bloodhounds are aids to finding fugitives."

"People born under the influence of the stars reflect this influence in their character."

"A square jaw is the sign of great will power."

"One can recognize a born criminal by his physical appearance."

"Character can be read in the lines of the face."

"Red-headed people are quick tempered."

"Character can be read from handwriting."

"If your ears burn, someone is talking about you."

"Poor penmanship is the sign of genius."

"Practice always makes perfect."

"People who learn slowly retain longer than those who learn quickly."

"Determination and will-power will always insure success."

These are but a few of the many beliefs which people hold and according to which they often govern their lives. Many more can be supplied and a careful, self-survey might bring to light surprising facts in this connection. Two years ago, in the nearby city of York, Pa., a murder trial was held which severely shocked most of us. The trial brought to light a belief in sorcery and witchcraft that was almost incredible. But such symptoms are only the superficial indications of deep-rooted superstition which abounds amid the higher circles of the social elite as well as among the lowly classes of more humble folk. Concealed beneath the cover of fortune telling, professional wisdom or "business advice," a great body of untruth and superstition is guiding the fate of the bulk of our people. Indeed so extensive and insidious is this tendency that it often assumes the cover of pure religion for its vin-

dication and intrenchment and tries to protect its privileged position by actual legislation. The advocates of the so-called "monkey-laws" are no doubt fundamentally sincere, but beneath their worthy purposes lies a mass of cherished superstition which masquerades in the pure garments of religious faith and devotion and social rectitude.

Science And Superstition

I have endeavored to bring to your attention how widespread is superstition in the control of the lives of people even in the Twentieth Century. Permit me, however, to correct an impression that this situation is not wholly as bad or as evil as it seems. "Superstition has much in common with science. Indeed, science may be regarded as an outgrowth and further development of superstition. It is well known to all of you that what is called science today had its roots in such stages as astrology, alchemy, physiognomy and phrenology and others, which were based upon semi-magical procedures and false assumptions. In both cases there is an attempt to control the forces of nature or super-nature to the will of man. In both cases there is a search for a cause through which the future may be determined. However, beyond this point lies the parting of the ways." An example, may, perhaps, make this clear.

In the region of Mesopotamia, human culture flourished at an early period. The culture of the date palm was an essential basis of this civilization. It was discovered at an early date that date palms yielded abundantly at times and niggardly at others. Gradually there grew up a ceremony including ritualistic dances, incantations and sacrifices including a practice which involved the gathering of the blossoms of the male palm trees and the tying of these flowers in the branches of the female trees. Of course, when such a ritual was performed there was an abundant crop of dates. Success, however, was not based upon analysis but was attributed to the entire ceremony as a whole. Little wonder that a deep conservatism would prescribe every detail of the ritual with iron clad rigidity. Rain dances and magic among the Indians of the Southwest similarly attribute success to the carefully prescribed formulae of ritualistic procedures, although they have less ground to stand upon than the first example.

In this example given it should be noted that the correct cause of the abundant crop of dates was embedded in a mass of irrelevant circumstances which to the superstitious mind were regarded as essential. A cause was sought but the wrong antecedent was considered the real one. And so it is with all superstition—it seeks a cause or an explanation for the phenomena observed but by its lack of method finally centers upon the wrong one. Of course it is easy to explain the failure of superstitious practices, some detail in the ritual, some ingredient in the formula, some word or phrase of the incantation was omitted or incorrectly performed.

Some superstitious practices involving sympathetic magic and sorcery are, indeed, directed towards personal gain and often sordid purposes. Magic had to be performed in secret—it was the possession of a few and it was

carefully concealed from questioning eyes. Mystery was added, deliberately, to confuse and deceive the twilight intellect of the credulous.

Since the discontinuance of the Doctrine of Formal Discipline as a guiding principle of education, the word discipline has fallen into considerable disrepute. At the risk, however, of losing the "union card" in any profession, I wish to point out the need for such a term. Of course, we will understand the term to exclude the idea of "transfer," but to include the concept of control—a check upon the vagaries of our mental fancies, inferences and even observations by a framework of facts or criteria. It is in this character that science transcends superstition.

The introduction of the concept of discipline in the method of science calls for a different attitude towards life. As in superstition a cause is being sought but this time the right one is dissected from the tangle of associated facts. To accomplish this the seeker must adopt a disinterested attitude toward his search. In other words, the whole motive of science is based upon the impersonal search for the truth. The ways of science are open and all may share its fruits. Thus "discipline" enters into our efforts and makes our search scientific.

It is easier to base our judgments upon our casual observations, it is easier to accept the outstanding antecedent as the cause of the succeeding event, it is so pleasant to enjoy our happy inferences and pet ideas without giving them the acid test of controlled experimentation. How irritated people become when we endeavor to explode a pet theory. How they enjoy moving the pet prejudices, half truths and superstitions about in their minds and believe they are thinking. Indeed, the discipline of science is necessary because we are naturally unscientific and superstitious.

The Discipline of Science

What, then, do we teach when we teach science? Science has sometimes been defined as a body of "systematic positive knowledge." But, I believe, that it is more than a body of accumulated information, it is more than passive recording, it is more than haphazard empiricism. This body of positive knowledge has been built through the discipline of patient, systematic, synthetic and constructive research. It has been built upon the accumulation of carefully tested experimentation. Controlled experimentation is the method of science. Scientific knowledge and experimentation are the identical twins of Twentieth Century thought.

Let us, then, consider the question with this thought in mind. Is it Boyls' law which we teach, the theory of evolution or the nebular hypothesis? Perhaps that is all—but no wonder that these things are so blissfully forgotten by our pupils. This is but another body of information and common sense has on hand such a body, vastly larger which our pupil graduates think will do just as well. And so they regard science as a course which they had had back in the high school days, or a smelly laboratory which they sought to "cut" whenever they could or a certain textbook which they wished had never been printed.

Is not this attitude largely the result of an incorrect point of view of

what really constitutes science? Does not the method of teaching the informations of "science" omit the first scientific essential? What is there scientific in science? This is indeed a difficult question, but one which I believe could be answered from our point of view. Science is more than knowledge—it is a state of mind. Is not the method by which scientific facts are obtained the heart of science? Facts are facts but they become scientific facts only when established by a scientific method. Science is a process of systematic and logical reasoning under the discipline of controlled experimentation. Can we really teach science from a text book alone? Is it possible to teach real science as a mass of information and omit the method through which the information was obtained? In other words, can modern science be taught by the scholastic method with its dependence upon deduction and authority and dogma, which was the method of the Middle Ages? It cannot. This, I believe, is the sum and substance of the problem of science teaching today. Are we, then, really teaching science or are we repeating the didactic gestures of the past ages? Are we really introducing a genuine experimental method in our teaching or are we merely performing tricks of magic? Are we taking our pupils into confidence, letting them assist in the setting up of controlled experiments or are we making them blindly follow a set of mimeographed directions? Are we as teachers trying to emulate Houdini or Thurston or are we humble followers of Newton or Pasteur? Are we training pupils to submit their "brain children" to the discipline of objective facts or are we leaving them in a hopeless welter of fancy? Are we building a language of accuracy and precision or a verbiage of empty and sterile concepts? In short are we helping the pupils of this day and age to become conscious of scientific method as the gateway to science? And finally, through a taste of real science do our pupils come to understand the great unity of nature and the humble past that is ours?

As teachers of science, it seems to me doing our best for the generation we are to serve, helping our boys and girls to live in Twentieth Century instead of the Tenth, we can be satisfied with no less than this. Real science can be attained only through the scientific method and the scientific attitude, which Sir Isaac Newton in the twilight of his life expressed so well. Listen to his words! "I do not know what I may appear to the world, but to myself I seem to have been only like a boy playing on the seashore and diverting myself in, now and then, finding a smooth pebble or a prettier shell than ordinary, whilst the great ocean of truth by all undiscovered before me."

E. CURT WALTHER

SECONDARY EDUCATION

CITY COLLEGE—October 23, 1931

Dr. Ernest J. Becker, Chairman

The meeting of the Secondary Department of the State Teachers' Association was held Friday afternoon, October 23, at 3.30 P. M. in the main

auditorium of the City College, Baltimore, Maryland. Dr. Ernest J. Becker presided and presented Dr. Joseph Ames, President of Johns Hopkins University. As these meetings are held under the auspices of the Johns Hopkins University, Dr. Ames introduced the speaker, Dr. Percival M. Symonds, Teachers' College, Columbia University.

Mr. Earl Hawkins, Principal of Bel Air High School was elected chairman, and Mr. Raymond S. Hyson, Principal of Franklin High School, was elected secretary.

Dr. Symonds spoke on "The Testing Program for High School." His address was as follows:

R. S. HYSON, Secretary

THE TESTING PROGRAM FOR HIGH SCHOOL

Percival M. Symonds, Teachers' College, Columbia University

The development of tests has now reached the point where the diversity of tests available inevitably leads to confusion in the minds of the high school teacher or principal. The very names are confusing. One hears mentioned aptitude tests, instructional tests, achievement tests, practice tests, diagnostic tests, achievement tests, objective tests, new type tests, prognosis tests, standardized tests, informal tests and others. It is the purpose of this paper to arrange these tests in orderly fashion, to point out the values of each in the high school, and to suggest a program for their use that can be adapted to any high school situation.

In general it may be stated that tests have two purposes.

(1) Tests provide information concerning the individual child which enables one to understand him better and to advise and guide him in the choice of his educational experiences.

(2) Tests help one to determine the learning that has taken place as a result of his educational experiences.

These two functions of tests interlock to some extent. When one uses a test to learn more about a child's abilities in order to guide him, he is using the result of learning which has taken place in the past. In this sense an intelligence test or an aptitude test makes use of things which the child has already learned, some of which he has learned in school. Indeed, we find that often the best prediction we can make of a pupil's progress in a subject is found in his previous achievement in that subject. But there are other matters concerning a child's interest and behavior which are equally as important in advising him, but which are not included under achievement testing.

It might seem natural that one who writes about tests should come to the conclusion that not enough attention is given to tests in school. It is my conviction, however, that in general teachers and supervisors have not seen clearly enough the importance of tests in the educational process. Educators too complacently plan the curriculum without ever attempting to

check up on the outcomes. As Briggs has said, "We have become a profession of experts in buildings, equipments, bond issues, organization, and administration. The demands in these fields have been loud for immediate attention, and it has been given with great skill and general satisfaction. The results are obvious to the public, and in their devotion to the fetish they have a faith that what they see is evidence of the real education for which they hoped." "There are too many teachers so devoted to their subjects that they cannot count the failures either of student achievement or of further pursuance of study and of later application."

Many a time in discussing some research problem which would involve the giving of a number of tests the objection has been raised to the writer that this time for testing cannot be afforded because it interferes with instruction. Many teachers complain if ten or fifteen minutes are taken for testing from the conventional recitation hour and yet it is my guess that achievement would not suffer if several hours customarily devoted to teaching were taken over for testing. What counts is not the loss in instruction but the loss in learning. If learning does not suffer from time devoted to testing then no harm is done, and there is a possibility that time devoted to testing up to a certain amount would be more productive of learning than an equal amount of time devoted to instruction.

It is particularly important that adequate time be allowed for testing for guidance purposes. By far too little attention is paid to an adequate understanding of the individual before he is permitted to choose his course, or is assigned to rooms, classes, sections, teachers and the like. But these matters of choice of course and placement in sectioning so profoundly affect the educational experiences which a pupil receives that it is of the utmost importance to ascertain all possible facts before these important decisions are made. For example, by a single test occupying not more than an hour and a half it is possible to determine in which section a pupil should be placed in French. By the expenditure of an hour or so of testing time the saving for a pupil of a whole term may be accomplished. It is extravagant waste to place a child in a class without first determining whether the educational experiences which that class will have are best suited to that pupil's abilities.

Testing the Outcomes of Learning

1. Diagnostic testing. First in order of importance for the testing program for high schools should be placed diagnostic testing. By a diagnostic test is meant a test whose construction and selection of material enables both teacher and pupil to determine successes and weaknesses in learning, and which enables the teacher to determine which pupils have made the most progress and which are in need of remedial work and individual instruction. Diagnostic tests are sometimes called instructional tests since they are closely allied to the instructional process.

In some subjects it is worthwhile to give a diagnostic test at the very first meeting of the class in order to find out what, if anything, the members of the class know about the subject at the start. If the items of this test are so constituted as to become an inventory of the subject (inventory

test), the test may be used to guide the teacher in the wise selection of subject matter according to the needs of the class. I have used a diagnostic test of this kind on "Construction of Objective Tests" at the beginning of my class "Measurement in Secondary Education" and find that it not only informs me what knowledge of the subject members bring with them to class, but stimulates the class immediately to find out what they do not know. Similar uses of the diagnostic test may be made in algebra or foreign language to enable the teacher to determine where the class stands at the start. Such a test has been proposed for college hygiene classes to make it possible for the instructor to direct instruction toward topics for which the test results indicate the most need.

But the diagnostic test finds its most practical use in everyday instruction in checking up on learning as it proceeds. Such tests might be used daily in algebra, foreign language or stenography to check constantly on the acquisition of new processes, new skills, new principles, new items to be learned. Or they may be given at the end of topics weekly or bi-weekly, as the case may be, in such subjects as history or science. Again, diagnostic tests might find their best use in concentrated campaigns when enthusiasm runs high and there is a genuine desire to learn in such subjects as English usage, spelling, safety, nutrition.

Any kind of objective test may be used for diagnosis. In general, however, recall tests (single answer tests, completion tests, even the much maligned essay type test which is semi-objectively scored) are preferable to recognition tests (true-false, multiple choice, matching) when the aim is to discover exactly what learning has taken place rather than to obtain a measure of the learning. When recognition tests are used for diagnosis one is never sure whether the right answer is obtained by chance or by actual knowledge.

Diagnostic tests may be prepared by the teacher, or one of the excellent prepared instructional tests which many publishing houses can furnish may be used. The skillful teacher will find it possible, by employing the cooperation of the class in scoring diagnostic tests and by devising economical methods of recording the results, to make extensive use of these instruments with little expenditure of time or effort.

2. Achievement Tests. Tests to measure achievement should be given at stated intervals according to the school program, six or eight weeks, or at the end of quarters, terms or semesters. These tests should be more or less formal and comprehensive. There is no doubt that if the most reliable results are to be obtained objective tests should be used, particularly the recognition type. When one is testing for achievement the diagnostic function of tests may be overlooked. However, for a final rating it is permissible to combine the results of diagnostic tests with the achievement test.

A prime issue concerns the relative merits of standardized and teacher made tests. This issue should be decided strictly on the basis of the validity and reliability of the tests. Since standardized tests are usually made by experts who have taken pains to select items of tested validity, differentiating power, stability and the like, they may in general be counted on as being

superior to teacher made tests. However, many teachers have learned to make tests which are in all respects the equal of the more carefully constructed standardized test. There are times when standardized tests do not satisfy the needs of the particular situation, especially in classes that depart from the traditional course of study. Standardized tests are made to fit standard or average situations. If one is using a new and unusual text in general science, or the direct method in the teaching of a foreign language, or a particular system of bookkeeping, it is hardly to be expected that a standardized test designed to fit a more conventional course would satisfy.

Teachers also believe, in general, that it is unfair to give a standardized test before the end of the year. For instance, most geometry teachers would object to giving the Schorling-Sanford Achievement Test in Plane Geometry to a class which has just finished Book I on the ground that it would be unfair to place before pupils questions covering books II, III, IV and V. Similar arguments might be raised against using the Woody-McCall Arithmetic Scale in the third grade on the ground that the class had not reached long division, fractions or decimals. Just as the third grade teacher might be interested in discovering where her pupils stood in arithmetic apart from their grade placement, so the geometry teacher might be interested in finding where her pupils stood in geometry apart from the particular point reached in the instruction. Perhaps some pupils might make considerable headway with questions in Books II, III, IV and V which would never have been revealed by questions limited solely to Book I.

As a matter of fact, there is evidence to show that standardized tests given in the middle of the year are not so reliable as tests constructed to fit the point reached in the instruction. Mr. Joseph Orleans of the George Washington High School of New York City gave a standardized test in algebra to a first year algebra class in February, and at the same time he gave a test with the same number of items devoted only to the topics which the class had studied up to that time. He found that the teacher-made test had practically the same reliability as the standardized test usually had when given at the end of the year, but that the reliability of the standardized test was appreciably lower when it was given in February. In short, when a standardized test is given in the middle of the year, many of the items are useless, and the effective test really is the equivalent of a test containing a smaller number of items. Standardized tests given in the middle of the year contain dead wood, a teacher made test of the same number of objective vital items is measurably superior.

Testing for Guidance

1. Intelligence Tests. Probably more information can be had concerning a pupil's abilities in a short time through an intelligence test than can be obtained in any other way. The pupil is confronted with a number of thoroughly standardized tasks of varying degrees of difficulty. What he is able to do with these tasks when compared with the performance of other pupils of various ages is symptomatic of what he can do in a number of other situations. Intelligence tests need be given only at intervals of two years.

Within this period it is possible to estimate the growth in mental development by suitably prepared tables. Intelligence tests are best given at the very opening of the school year, if possible on the first day or two. Then they should be immediately scored and tabulated so that the results can be used in guidance, sectioning and the like. Some schools with more or less constant student body prefer to give intelligence tests late in the spring so that the results will be readily available in guiding and placing pupils without delay at the opening of school in the fall.

2. Prognosis tests. It may be of interest to learn that tests are now available which can be used for accurate prediction of success in such subjects as algebra, geometry, Latin and modern foreign language. For prediction purposes in separate subjects these tests are more accurate than intelligence tests. Many teachers will wish to use these tests for guidance, for sectioning and for becoming acquainted early in the year with the capacity of the pupils to learn the particular subject. Prognosis tests, like intelligence tests, may be given at the opening of the school term in the fall, or, if so desired, to possible candidates for the subject late in the spring.

3. Achievement tests, already described, are of use in the guidance program.

4. Interest questionnaires. Several techniques have been developed recently for obtaining additional information concerning pupils for the purpose of guidance. Outstanding among these is the interest questionnaire. Investigations have made it apparent that tests cannot be relied on for guiding pupils in their fundamental educational choices, inasmuch as the basis on which the decision rests are not matters of ability. Interest seems to be an important factor in determining wise choices and questionnaires designed to tap various directions of interest have shown high relationships with actual choice. Interest questionnaires designed to help boys (and girls) choose their curriculum when it first differentiates should be given at the end of the year before the first differentiating choice must be made. This is at the end of the eighth grade in numerous school systems.

5. Behavior schedules. Many schools include on their report card space for estimates of character qualities. Although this is done partly as a check on the learning or development of these qualities, it has its most important function in guidance. This rating, if it is to be done at all, should be done much more systematically and carefully than is usually the case. It is the writer's belief that ratings of behavior should be made but once a year, say a couple of months after the beginning of school, rather than every time the report cards go out. Ratings obtained this infrequently would be concerned with the more stable manifestations of personality rather than with the superficial shifting of classroom attitude and mood. These ratings should be of readily observable behavior characteristics, rather than obscure traits or qualities. These ratings are usually made by the teacher, but good results have been obtained by having pupils rate each other. This adds greatly to the reliability of the ratings and often supplements the point of view held

by the teacher. It has also been found that instead of rating each pupil, the ends desired are reached more easily and accurately by identifying only those pupils outstanding in any respect with regard to behavior. Better understanding of behavior is essential if guidance is to be carried out in any comprehensive way.

6. Adjustment questionnaires. A new departure in schools is the use of the adjustment questionnaire for obtaining a pupil's own statement of his reactions to the school situation. In the past pupils were not consulted as to their likes and attitudes regarding school—they were expected to submit and endure. The present development is intended not so much to obtain criticisms of the school as to discover the pupils' own reactions toward all phases of their educational program with a view toward a better understanding of the pupil. A questionnaire of this kind usually uncovers a number of cases of poor school adjustment, some of which can be remedied by changing the pupils' program, teachers, class, etc., and others which indicate spots in the school program that need remedying. Questionnaires of this kind may be broadened to include community, home, and personality adjustments, and the information thus obtained is of great value in understanding and guiding individual cases. A questionnaire of this kind should be given not oftener than once a year to any one group of pupils (perhaps even less frequently), and not until two or three months after the opening of the school year. If the adjustment questionnaire calls for confidential reactions to curriculum, teachers, or pupils, care should be taken that this confidence is not violated, and that pupils' comments do not find their way into the hands of teachers or others who would improperly use the information which they contain.

7. Miscellaneous data. In a comprehensive guidance program there are other data concerning pupils which can be systematically obtained and which contribute to a better understanding of their personal needs and problems. The daily schedule is one such datum. This is usually obtained during a typical week in the middle of the year by having pupils keep a record of their daily activities on specially prepared forms. Record should also be systematically made of extra-curricular activities engaged in, and the special accomplishments and interests of each pupil outside of school. Facts of this kind help in the better understanding of a pupil and enable the school to adjust its program to his needs.

Interest questionnaires, behavior schedules, adjustment questionnaires, the daily schedule, and similar records are new to most schools. However they provide such valuable information concerning each pupil which can be used in guiding him in his educational experiences that in an effective guidance program they cannot be neglected. All data of this sort make it easier to provide an educational program adapted to the needs of every pupil.

8. The health examination. Unfortunately the health examination, since it is generally administered by a physician or athletic director, is usually not considered a part of the testing program of the school. In most

schools it is probably true that the records of the health examination are kept in a separate file in the doctor's office or the physical examination room and that the records are never brought together with other records for a pupil. This is indeed unfortunate inasmuch as the health record is of significance in an adequate program of guidance. Health examinations should be given annually to each pupil in the school with adequate follow-up tests in cases where special defects have been noticed.

Administration of Testing

As a general rule the classroom teacher should be responsible for the administration of the testing of the outcomes of learning. Whenever there is doubt as to the competence of a teacher to administer and interpret tests—diagnostic, achievement, standardized—this is a grave challenge of the competence of the teacher. The administration of diagnostic and achievement tests, since they are so closely tied up with the teaching process, ought to be the province of every teacher.

Tests for guidance, on the other hand, are better left to the guidance counselor or whoever is responsible for the guidance program. In the first place, they often require specialized skill for administration which only the trained person possesses. For instance, some tests require careful timing, others are difficult to score. Many of these tests and questionnaires may be most economically given to large groups gathered in the assembly hall or lunchroom; others must be given singly to one pupil at a time. In the second place many of these questionnaires call for confidential information which should be in the possession of the individual who is trained to make correct interpretations of it. If guidance is the function of every teacher then every teacher should be entrusted with this information. On the other hand, many are beginning to realize that guidance is not something that anyone can "pick up," but requires specialized training. In the third place, tests used for guidance should be interpreted in relation to one another. Someone should see the child as a whole, rather than as a learner of subject matter. For these reasons it seems desirable that the administration of tests for guidance be entrusted to the specialist in guidance.

Finally, any comprehensively conceived testing program carries with it the need for a system of permanent cumulative records. Much of the value of testing is lost because the significance of the results are never seen as a whole. In the first place, the test results for a pupil gathered in any one year by teachers, counselors, physicians, need to be brought together so that a picture of the whole child is presented. In the second place, these records need to be cumulated yearly in order to show development. We lose in trying to interpret a boy or girl by a mere cross section—a longitudinal record of development is needed as well.

THE ARTS AND CRAFT CLUB OF MARYLAND

Meeting—October 24th, 1931

The annual breakfast and fall business meeting of the Arts and Craft

Club of Maryland was held in Hotel Rennert, Baltimore, Saturday, October 24th, 1931, at 7.30 A. M.

Following the breakfast, the president called the meeting to order and asked for the roll call to which each member responded by stating briefly, his objective for the year. The minutes of the spring meeting held in Baltimore were read and approved.

Wm. L. Hull, chairman of the committee on the club emblem, presented a print which was unanimously voted upon as suitable for the club emblem.

The following committees made their reports which were accepted as read:

Shop organization, C. J. McAuliffe, chairman; publicity, A. B. Amoss, chairman; entertainment, W. L. Hull, chairman; executive, J. J. Seidel, chairman.

The first address of the meeting was made by Mr. C. W. Sylvester, Director of Vocational Education of the Baltimore Schools. He called attention to the extremely difficult and trying period through which we are passing, especially in the industrial field, and to the need of self-adjustment and cooperation on the part of all to meet this contingency. He said that the Industrial Arts and Shop teachers are making a great contribution toward a foundation upon which the trades can be built—this being as essential as the fundamental “three R’s” since fifty per cent of the pupils go into industry. He urged the Industrial Arts teachers to realize the significance and importance of their jobs and to make a greater effort to increase their efficiency.

Dr. J. D. Blackwell, State Director of Vocational Education, then spoke of the work being initiated by the Industrial Arts teachers which stresses the appreciation of a job well executed from a consumer’s viewpoint: the substitution of the idea of a well-finished product in as short a time as possible for the old idea of “putting in time” when the boss is about. He outlined some of the objectives in his work parallel very closely with some of those in industrial arts.

Mr. C. M. LeFevre, of Taneytown, in speaking of Shop Concomitants said that the concomitant learnings grow out of the project, including carefulness, cooperation, loyalty, faithfulness, honesty, truthfulness, persistency and patience, be on the four square level as a well jointed board; we may be twisted and bent into well balanced characters like soft iron is made into graceful and attractive project: snitching of one’s ideas in a project may develop characters for racketeers and bootleggers; unless the construction of a project leads the boy to plan, choose and do, relative to the ideals and principles of life, we, as teachers are falling down on a part of our job, at least.

Mr. John J. Seidel, Supervisor of Industrial Education, briefly outlined the State plan for the year, then emphasized the necessity for more team work by the teachers, urging each to do a 100% job this year, to use school funds judiciously, to justify all expenditures and to be economical, using each dollar effectively.

Remarks by the president.

Each member had been requested to bring to the meeting at least two blue prints of such projects as might be profitably added to the course of study in the shops. These were collected, examined and discussed. Mr. Huyett advised that he would make sufficient copies of each that each member might have his own set of them.

The Nominating Committee, Mr. C. M. LeFevre, chairman, then offered the following for re-election to office:

President—Mr. Max Chambers, Preston.

Vice-President—Mr. C. J. McAuliffe, Towson.

Sec'y-Treas.—Mr. A. L. Greenwood, Chestertown.

These officers were duly elected.

Adjournment.

ARTHUR L. GREENWOOD, Secretary

CITY—STATE DINNER

The City-State dinner, under the joint auspices of the Maryland State Teachers Association and the Public School Teachers Association of Baltimore, was held at the Lord Baltimore Hotel on the evening of October 23, beginning at six o'clock. Mr. Charles W. Sylvester, Director of Vocational Education of Baltimore, acted as master of ceremonies. He was introduced to the guests by Miss Margarietta Collins, President of the Public School Teachers Association of Baltimore, who welcomed the teachers and their guests in the name of the two associations.

Over eleven hundred teachers from the counties and the city were present at the dinner and many were turned away because there was not room.

At the speakers' table were the officers of the sponsoring associations; the presidents of the State Board of Education and the Baltimore School Board; the superintendents of the State school system and the Baltimore school system; the presidents of the University of Maryland and the Johns Hopkins University; the president of the Maryland Congress of Parents and Teachers and the secretary of the Public School Association of Baltimore.

The guests of honor were His Excellency, Albert C. Ritchie, Governor of Maryland, and His Honor, Howard W. Jackson, Mayor of Baltimore, each of whom addressed the audience with a few happy words of greeting.

After the dinner a concert was given by Miss Helen Stokes, a Baltimore soprano, and Mr. Robert Wiedefeld, barytone. The remainder of the evening was spent in dancing and card playing.

The evening of entertainment was planned and directed by Miss M. Theresa Wiedefeld, State Chairman, assisted by Miss Emma Eames Boettner, and Miss Margarietta Collins, City Chairman, assisted by Miss Agnes V. Delaney.

AGRICULTURAL SECTION

CITY COLLEGE, ROOM 136

Friday, October 23rd, 1931; 3.15 P. M.

Chairman—Donald Watkins, Mt. Airy

Secretary—L. E. Taylor, Centreville, Md.

- “Science in Relation to Vocation Agriculture”.....E. W. Broome,
Superintendent of Schools, Montgomery County
- “How Teachers of Vocational Agriculture may Cooperate with the Federal
Farm Board”.....Dr. F. B. Bomberger, Federal Farm Board
- “Programs of Work for Local Chapters of F. F. A.”.....Harry McDonald
Agricultural Teacher, Baltimore County
-

VOCATIONAL EDUCATION

LUNCHEON AND ANNUAL MEETING, EASTERN HIGH SCHOOL
CAFETERIA, NORTH WEST BROADWAY

Friday, October 23, 1931; 12.00—1.45

Chairman—Miss Elisabeth Amery, State Supervisor of Home Economics
Education, Baltimore

Secretary—Mrs. Frances D. North, Western High School

Address by Wesley A. O’Leary, Assistant Commissioner of Education, State
Department of Public Instruction, Trenton, New Jersey.

BUSINESS MEETING

Minutes 1930 Meeting.]

Remarks by President.

Election officers 1932.

Election of Delegates to A. V. A. Convention.

STANDING COMMITTEES FOR 1932

(Appointed by the President, James M. Bennett)

Educational Progress:

Mr. H. B. Chapman, 3 E. 25th St., Baltimore.

W. S. Fitzgerald, Supt., Princess Anne.

Miss Ida V. Flowers, Montebello School, Baltimore.

Resolutions:

Supt. A. C. Humphries, Snow Hill.

Miss Lillian Compton, Cumberland.

Miss Anna Shaw, Baltimore.

Auditing:

Dr. E. J. Becker, Western H. S., Baltimore.
Walter Huffington, Lexington Bldg., Baltimore.
George Gaither, 3 E. 25th St., Baltimore.

Credentials:

J. H. Schwatka, Southern Jr. H. S., Baltimore.
E. Guy Stapleton, Raspeburg.
L. G. Pullen, Catonsville.

Legislation:

E. W. Broome, Supt., Rockville.
Miss Edna Engle, Baltimore.
Mr. Ralph Webster, Frostburg.
Miss Hope Greenwell, Leonardtown.
Mrs. H. Ross Coppage, 3510 Fairview Ave., Baltimore.

Teachers Pensions:

Committee discontinued.

N. E. A. Home:

Grace Kramer, Bureau of Measurements, Baltimore.
Howard A. Kinhart, Annapolis.

OFFICERS
MARYLAND STATE TEACHERS' ASSOCIATION AND
AFFILIATED DEPARTMENTS FOR 1932
MARYLAND STATE TEACHERS' ASSOCIATION

President.....James M. Bennett, Co. Supt., Salisbury
First Vice-President.....Miss Eva Gerstmyer,
School No. 214, Baltimore
Second Vice-President.....R. Floyd Cromwell, Brunswick
Treasurer.....Dr. R. Berryman, 4224 Euclid Ave., Baltimore
Secretary.....Walter H. Davis, Havre de Grace

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James M. Bennett, President.
Miss Eva Gerstmyer, Vice-President.
Dr. Samuel M. North, 1929-32.
Charles W. Sylvester, 1930-33.
John L. Dunkle, 1931-34.

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O. T. Graser, Secretary Oakland.

Art:

Miss Mary H. Chrissenger, Chairman, Hagerstown.

Miss Lena Picker, Secretary, 2228 W. North Ave., Baltimore.

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Dr. W. P. Mustard, Chairman, Johns Hopkins Univ., Baltimore.

Miss Hattie J. Adams, Secretary, Western H. S., Baltimore.

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History:

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Miss Helen Miller, Secretary, Eastern H. S., Baltimore.

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Miss Elisabeth Amery, Chairman, State Dept. of Ed., Baltimore.

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Miss Genevieve P. Butler, Chairman, Forest Park H. S., Baltimore.

Miss Margaret Benson, Secretary, Catonsville.

Parent-Teacher:

Mrs. H. Ross Coppage, Chairman, 3510 Fairview Ave., Baltimore.

Mrs. Fred H. Cook, Secretary, 2940 Harford Rd., Baltimore.

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Dr. Wm. Burdick, Chairman, 7 E. Mulberry St., Baltimore.

Miss Bertha M. Schools, Secretary, 3 E. 25th St., Baltimore.

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Miss Grace Naumann, Chairman, School No. 44, Baltimore.

Miss Clara Crockett, Secretary, School No. 51, Baltimore.

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Miss Mary T. Carroll, Chairman, 3 E. 25th St., Baltimore.

Edward G. Stapleton, Secretary, Raspeburg.

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Earle T. Hawkins, Chairman, Bel Air.

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Vocational Education:

Allan Robinson, Chairman, Ottmar Mergenthaler School of Printing, Baltimore.

Mrs. Frances D. North, Secretary, Western H. S., Baltimore.

SESSIONS OF THE MARYLAND STATE TEACHERS' ASSOCIATION

- 1—1866 Western Female High School, Baltimore. President, Thos. D. Baird; Treasurer, A. F. Wilkerson; Recording Secretary, A. F. Wilkerson; number of members, 83.
- 2—1867 St. John's College. President, Thos. D. Baird; Treasurer, William Elliott, Jr.; Recording Secretary, A. F. Wilkerson.
- 3—1868 Western Female High School, Baltimore. President, C. K. Nelson; Treasurer, Alexander Hamilton; Recording Secretary, A. F. Wilkerson.
- 4—1869 Western Female High School, Baltimore. President, P. M. Leakin; Treasurer, Alexander Hamilton; Recording Secretary, William Wardenburg.
- 5—1870 Hall, House of Delegates, Annapolis. President, J. C. Welling; Treasurer, Alexander Hamilton; Recording Secretary, A. F. Wilkerson.
- 6—1871 Eastern Female High School, Baltimore. President, W. B. Worthington; Treasurer, Alexander Hamilton; Recording Secretary, A. F. Wilkerson.
- 7—1872 Court House, Frederick City. President, William Elliott, Jr.; Treasurer, Alexander Hamilton; Recording Secretary, A. F. Wilkerson.
- 8—1873 Lyceum Hall, Hagerstown. President, James M. Garnett; Treasurer, Alexander Hamilton; Recording Secretary, A. F. Wilkerson.
- 9—1874 Western Female High School, Baltimore. President, D. A. Hollingshead; Treasurer, Alexander Hamilton; Recording Secretary, A. F. Wilkerson.
- 10—1875 Cumberland, Md. President, William Elliott, Jr.; Treasurer, Alexander Hamilton; Recording Secretary, A. F. Wilkerson.
- 11—1876 City College, Baltimore. (One day during N. E. A.) President, James L. Bryan; Treasurer, Alexander Hamilton; Recording Secretary, A. F. Wilkerson.
- 12—1877 Easton. President, James L. Bryan; Treasurer, Alexander Hamilton; Recording Secretary, A. F. Wilkerson.
- 13—1878 City College, Baltimore. President, John F. Arthur; Treasurer, C. G. Edwards; Recording Secretary, A. F. Wilkerson.
- 14—1879 Court House, Hagerstown. President, P. R. Lovejoy; Treasurer, C. G. Edwards; Recording Secretary, A. F. Wilkerson.

- 15—1880 Ocean City. President, M. A. Newell; Treasurer, C. G. Edwards; Recording Secretary, A. F. Wilkerson.
- 16—1881 Frederick. President, George M. Upshur; Treasurer, C. G. Edwards; Recording Secretary, A. F. Wilkerson.
- 17—1882 Cumberland. President, A. G. Harley; Treasurer, C. G. Edwards; Recording Secretary, A. F. Wilkerson.
- 18—1883 Ocean City. President, George L. Grape; Treasurer, C. G. Edwards; Recording Secretary, A. F. Wilkerson.
- 19—1884 Ocean City. President, A. S. Kerr; Treasurer, C. G. Edwards; Recording Secretary, A. F. Wilkerson.
- 20—1885 Deer Park. President, J. W. Thompson; Treasurer, C. G. Edwards; Recording Secretary, A. F. Wilkerson.
- 21—1886 Blue Mountain House. President, F. A. Soper; Treasurer, Lewis Ford; Recording Secretary, A. F. Wilkerson.
- 22—1887 Hygeia Hotel, Old Point, Va. President, P. A. Witmar; Treasurer, George S. Grape; Recording Secretary, A. F. Wilkerson.
- 23—1888 Mountain Lake Park. (With West Virginia Association). Lewis Ford, First Vice-President; Treasurer, Alexander Chaplain; number of members, 162.
- 24—1889 Blue Mountain House. President, H. G. Weimer; Treasurer, Alexander Chaplain; Recording Secretary, A. F. Wilkerson; number of members, 167.
- 25—1890 Bay Ridge. President, W. H. Dashiell; Treasurer, Alexander Chaplain; Recording Secretary, A. F. Wilkerson; number of members, 120.
- 26—1891 Ocean City. President, John E. McCahan; Treasurer, Alexander Chaplain; Recording Secretary, A. F. Wilkerson; number of members, 236.
- 27—1892 Blue Mountain House. President, James A. Dittenbaugh; Treasurer, Alexander Chaplain; Recording Secretary, A. F. Wilkerson; number of members, 140.
- 1893 No meeting of the M. S. T. A. Executive Committee; after careful deliberation, postponed meeting until 1894 on account of Columbian Exposition being held in Chicago.
- 28—1894 Annapolis. President, Wilbur F. Smith; Treasurer, Alexander Chaplain; Recording Secretary, A. F. Wilkerson; number of members, 132.

- 29—1895 Blue Mountain House. President, M. Bates Stephens; Treasurer, Alexander Chaplain; Recording Secretary, A. F. Wilkerson; number of members, 129.
- 30—1896 Deer Park. President, Prof. Charles F. Raddatz; Treasurer, Alexander Chaplain; Recording Secretary, A. F. Wilkerson; number of members, 78.
- 31—1897 Blue Mountain House. President, E. B. Prettyman; Treasurer, Alexander Chaplain; Recording Secretary, A. F. Wilkerson; number of members, 162.
- 1898 No session of M. S. T. A. N. E. A. met in Washington. Ebbitt House was headquarters for Maryland delegation. Officers and Executive Committee of M. S. T. A. met at Ebbitt House and decided to hold no meeting on account of meeting of N. E. A. The ledger shows receipt of \$15.00 for membership fees and \$11.40 for badges.
- 32—1899 Ocean City. President, John T. White; Treasurer, Alexander Chaplain; Recording Secretary, A. F. Wilkerson; number of members, 144.
- 33—1900 Chautauqua Beach. President, L. L. Beatty; Treasurer, John E. McCahan; Recording Secretary, A. F. Wilkerson; number of members, 71.
- 34—1901 Blue Mountain House. President, Edwin Hebden; Treasurer, John E. McCahan; Recording Secretary, A. G. Harley; number of members, 169.
- 35—1902 Ocean City. President, F. Eugene Wathen; Treasurer, John E. McCahan; Recording Secretary, A. G. Harley, number of members, 166.
- 36—1903 Ocean City. President, Joseph Blair; Treasurer, John E. McCahan; Recording Secretary, A. G. Harley; number of members, 229.
- 37—1904 Ocean City. President, H. Crawford Bounds; Treasurer, John E. McCahan; Recording Secretary, A. G. Harley; number of members, 216.
- 38—1905 Blue Mountain House. President, Arthur F. Smith; Treasurer, John E. McCahan; Recording Secretary, A. G. Harley; number of members, 356.
- 39—1906 Ocean City. President, Dr. S. Simpson; Treasurer, John E. McCahan; Recording Secretary, Hugh W. Caldwell; number of members, 384.

- 40—1907 Jamestown Exposition. President, Dr. James W. Cain; Treasurer, John E. McCahan; Recording Secretary, Hugh W. Caldwell; number of members, 374.
- 41—1908 Ocean City. President, Albert S. Cook; Treasurer, John E. McCahan; Recording Secretary, Hugh W. Caldwell; number of members, 375.
- 42—1909 Mountain Lake Park. President, Sarah E. Richmond; Treasurer, John E. McCahan; Recording Secretary, Hugh W. Caldwell, number of members, 566.
- 43—1910 Ocean City. President, E. A. Browning;* Treasurer, R. Berryman; Recording Secretary, Hugh W. Caldwell; number of members, 420.
- 44—1911 Braddock Heights. President, Howard C. Hill; Treasurer, R. Berryman; Recording Secretary, Hugh W. Caldwell; number of members, 792.
- 45—1912 Braddock Heights. President, Earle B. Woods; Treasurer, R. Berryman; Recording Secretary, Hugh W. Caldwell; number of members, 955.
- 46—1913 Annapolis. President, James B. Noble; Treasurer, R. Berryman; Recording Secretary, Hugh W. Caldwell; number of members, 785.
- 47—1914 Ocean City. President, Woodland C. Phillips; Treasurer, Dr. R. Berryman; Recording Secretary, Hugh W. Caldwell; number of members, 361.
- 48—1915 Ocean City. President, Dr. E. F. Buchner; Treasurer, Dr. R. Berryman; Recording Secretary, Hugh W. Caldwell; number of members, 720.
- 49—1916 Ocean City. President, William J. Holloway; Treasurer, Dr. R. Berryman; Recording Secretary, Hugh W. Caldwell; number of members, 1,089.
- 50—1917 Baltimore. President, Sydney S. Handy; Treasurer, Dr. R. Berryman; Recording Secretary, Hugh W. Caldwell; number of members, 3,418.
- 51—1918 Baltimore. President, Nicholas Orem; Treasurer, Dr. R. Berryman; Recording Secretary, Hugh W. Caldwell; number of members, 825.
- 52—1919 Baltimore. President, David E. Weglein; Treasurer, Dr. R. Berryman; Recording Secretary, Hugh W. Caldwell; number of members, 2,580.

- 53—1920 Ocean City. President, G. Lloyd Palmer; Treasurer, Dr. R. Berryman; Recording Secretary, Hugh W. Caldwell; number of members, 515.
- 54—1921 Baltimore. Acting-President, G. Lloyd Palmer;** Treasurer, Dr. R. Berryman; Recording Secretary, Hugh W. Caldwell; number of members, 2,415.
- 55—1922 Baltimore. President, Dr. Norman W. Cameron; Treasurer, Dr. R. Berryman; Recording Secretary, Hugh W. Caldwell; members, 2,111.
- 56—1923 Baltimore. President, E. F. Webb; Treasurer, Dr. R. Berryman; Recording Secretary, Hugh W. Caldwell; members, 2,080.
- 57—1924 Baltimore. President, Walter H. Davis; Treasurer, Dr. R. Berryman; Recording Secretary, Hugh W. Caldwell; members, 1,997.
- 58—1925 Baltimore. President, M. S. H. Unger; Treasurer, Dr. R. Berryman; Recording Secretary, Hugh W. Caldwell; members, 2,424.
- 59—1926 Baltimore. President, Samuel M. North; Treasurer, Dr. R. Berryman; Recording Secretary, Hugh W. Caldwell, deceased; Secretary Pro-tem, Walter H. Davis; members, 2,209.
- 60—1927 Baltimore. President, John Coulbourn; Treasurer, Dr. R. Berryman; Secretary, Walter H. Davis; members, 2,329.
- 61—1928 Baltimore. President, Miss Edna M. Marshall; Treasurer, Dr. R. Berryman; Secretary, Walter H. Davis; members, 2,365.
- 62—1929 Baltimore. President, Charles W. Sylvester; Treasurer, Dr. R. Berryman; Secretary, Walter H. Davis; members, 3,616.
- 63—1930 Baltimore. President, Byron J. Grimes; Treasurer, Dr. R. Berryman; Secretary, Walter H. Davis; members, 3,595.
- 64—1931 Baltimore. President, Miss Helen M. Johnson; Treasurer, Dr. R. Berryman; Secretary, Walter H. Davis; members, 3,550.

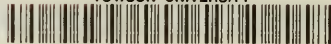
*Succeeded Mr. George Biddle, deceased.

**Succeeded Dr. A. H. Krug, resigned.



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